

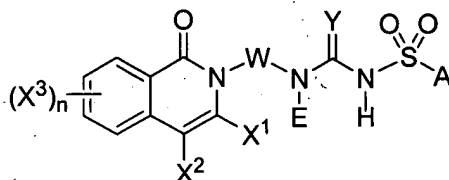
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.-22. (Canceled)

23. (Currently amended) A compound of the following formula:



wherein:

A is thienyl, optionally substituted with from one to two halogen atoms;

W is phenylene, optionally substituted with from one to two substituents selected from the group consisting of halogen, methyl and trifluoromethyl;

E is selected from the group consisting of H, -C₁-C₈ alkyl, polyhaloalkyl, and -C₃₋₈-cycloalkyl, aryl, alkylaryl, substituted aryl, heteroaryl, and substituted heteroaryl;

n is an integer from 0-4;

each instance of X¹, X² and X³ is a member independently selected from the group consisting of hydrogen, halogen, polyhaloalkyl, -OR³, -SR³, -CN, -NO₂, -SO₂R³, -CONHR³, -C(=NH)NHCH₃, -C₁₋₁₀-alkyl, -C₃₋₈-cycloalkyl, aryl, aryl-substituted by 1-4 R³ groups, amino, amino-C₁₋₈-alkyl, C₁₋₃-acylamino, C₁₋₃-acylamino-C₁₋₈-alkyl, C₁₋₆-alkylamino, C₁₋₆-alkylamino C₁₋₈ alkyl, C₁₋₆ dialkylamino, C₁₋₆ dialkylamino C₁₋₈-alkyl, C₁₋₆ alkoxy, C₁₋₆ alkoxy-C₁₋₆-alkyl, carboxy-C₁₋₆-alkyl, C₁₋₃-alkoxycarbonyl, C₁₋₃-alkoxycarbonyl- C₁₋₆-alkyl, carboxy C₁₋₆ alkyloxy, hydroxy, hydroxy C₁₋₆ alkyl, and a 5 to 10 membered fused pyrrolidino, imidazolo, thiazolo or oxazolo or non-fused aromatic or nonaromatic heterocyclic ring system, having 1 to 4 heteroatoms independently selected from N, O, and S, and a 5 to 6 membered aromatic or nonaromatic heterocyclic ring selected from the group consisting of oxazolinyl, pyrrolidinyl, imidazolinyl and pyridyl, with the proviso that the carbon and

nitrogen atoms, when present in the heterocyclic ring **system**, are unsubstituted, mono- or di-substituted independently with 0-2 R^4 groups;

R^3 and R^4 are each independently selected from the group consisting of hydrogen, halogen, -CN, -NO₂, -C₁₋₁₀ alkyl, C₃₋₈-cycloalkyl, aryl, amino, amino-C₁₋₈-alkyl, C₁₋₃-acylamino, C₁₋₃-acylamino-C₁₋₈-alkyl, C₁₋₆-alkylamino, C₁₋₆-alkylamino C₁₋₈ alkyl, C₁₋₆ dialkylamino, C₁₋₆ dialkylamino C₁₋₈ alkyl, C₁₋₆ alkoxy, C₁₋₆ alkoxy-C₁₋₆-alkyl, carboxy-C₁₋₆-alkyl, C₁₋₃-alkoxycarbonyl, C₁₋₃-alkoxycarbonyl-C₁₋₆-alkyl, carboxy-C₁₋₆-alkyloxy, hydroxy, hydroxy-C₁₋₆-alkyl, -thio and thio-C₁₋₆-alkyl, **wherein optionally two alkyl groups attached to a nitrogen atom can be combined with the nitrogen atom to form a pyrrolidinyl, piperidinyl or morpholinyl ring;**

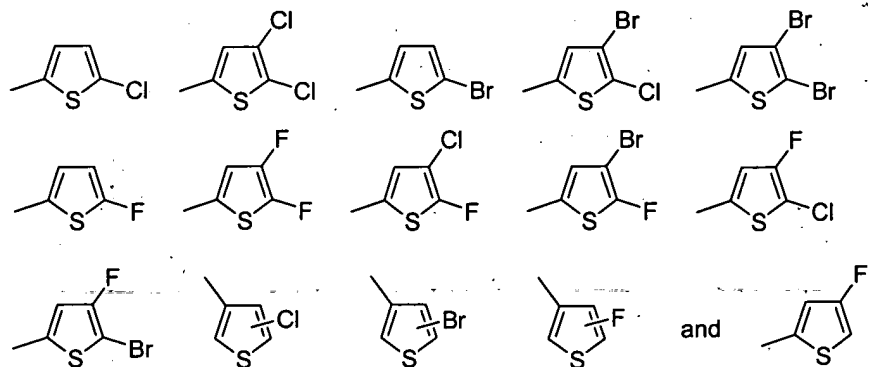
Y is selected from the group consisting of O, S, N-OR⁵ and NR⁵;

R⁵ is selected from the group consisting of H, C₁₋₁₀ alkyl, C₃₋₈-cycloalkyl, and CN;

or pharmaceutically acceptable salts ~~and~~ **prodrugs**.

24. (Original) A compound according to claim 23, wherein

A is selected from the group consisting of:



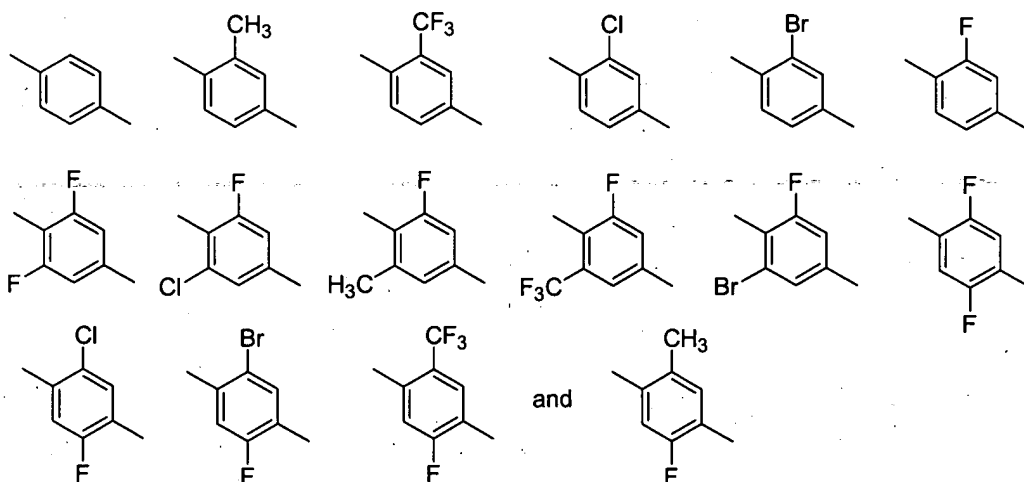
Y is selected from the group consisting of O, S, N-OR⁵ and NR⁵;

E is selected from the group consisting of H, or C₁₋₈alkyl; and

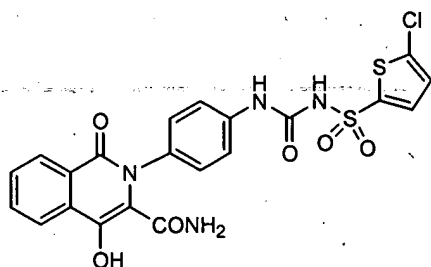
Appl. No. 09/920,325
Amdt. dated November 13, 2003
Amendment under 37 CFR 1.116 Expedited Procedure
Examining Group 1624

PATENT

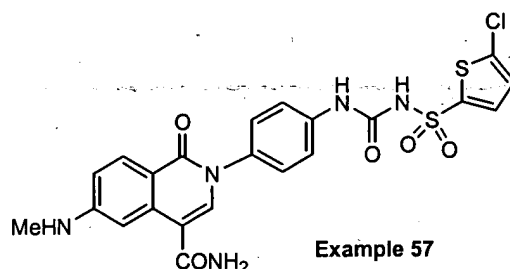
W is selected from the group consisting of:



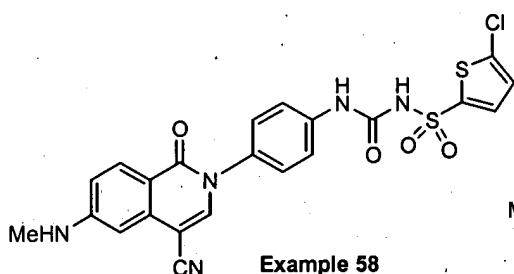
25. (Currently amended) A compound of claim 23, selected from the group consisting of:



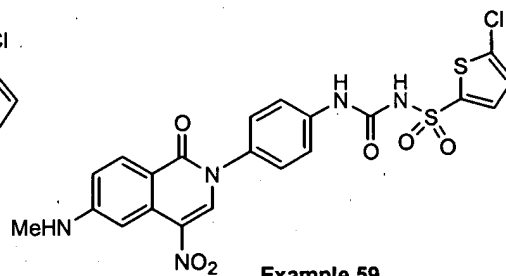
Example 56



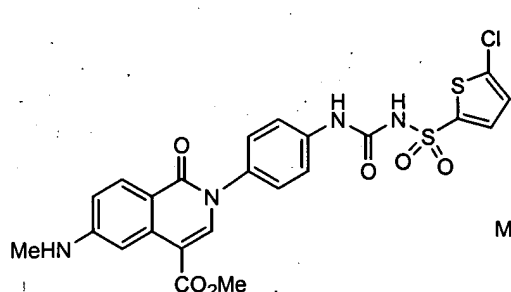
Example 57



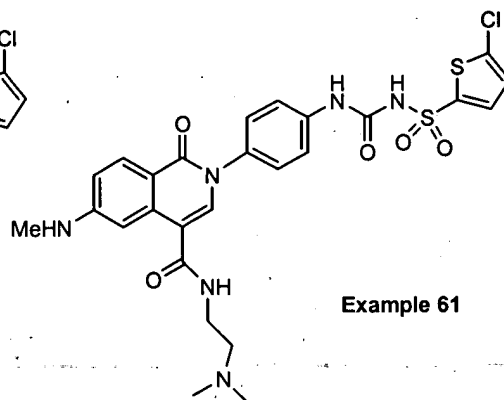
Example 58



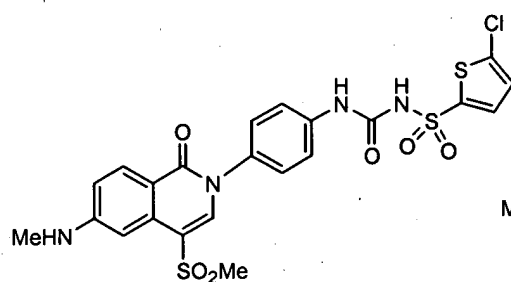
Example 59



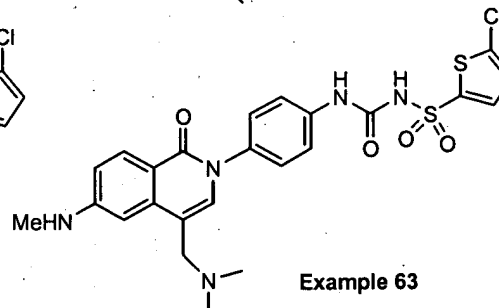
Example 60



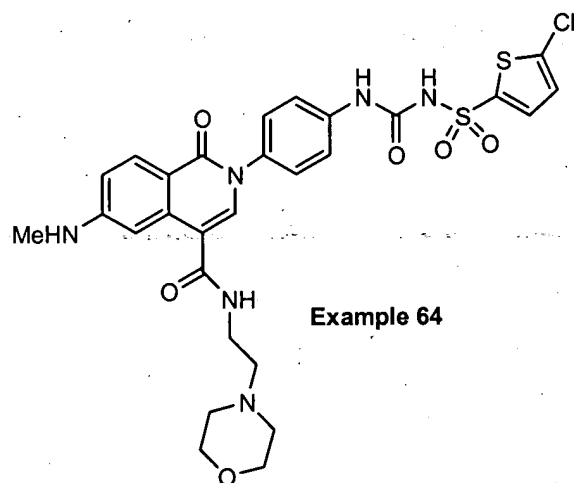
Example 61



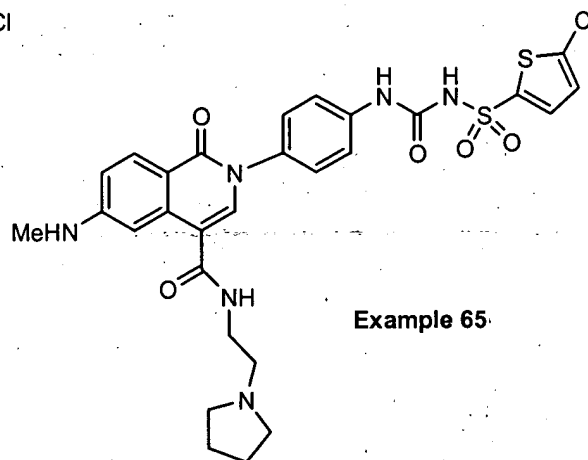
Example 62



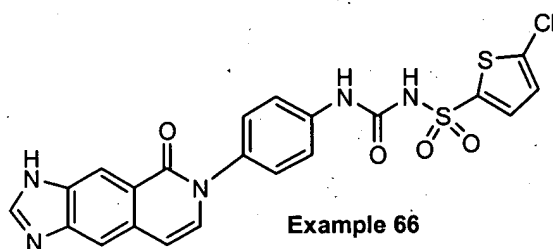
Example 63



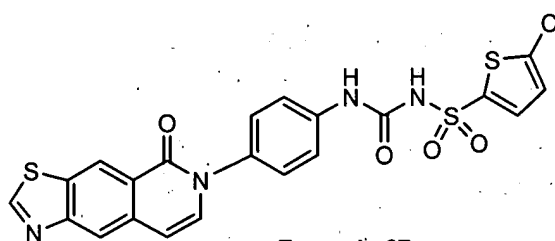
Example 64



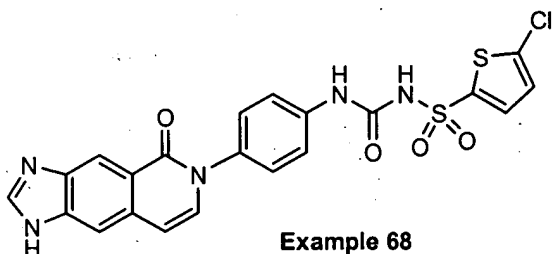
Example 65



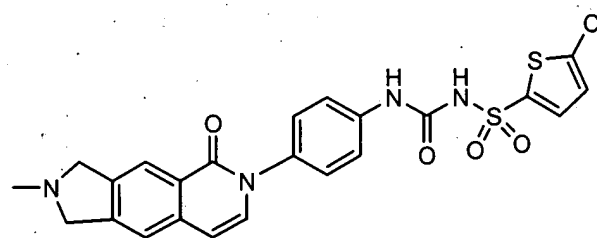
Example 66



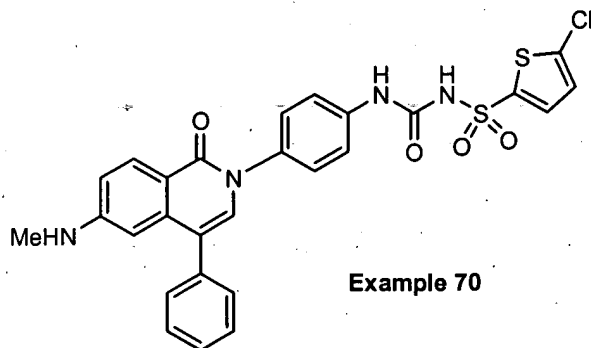
Example 67



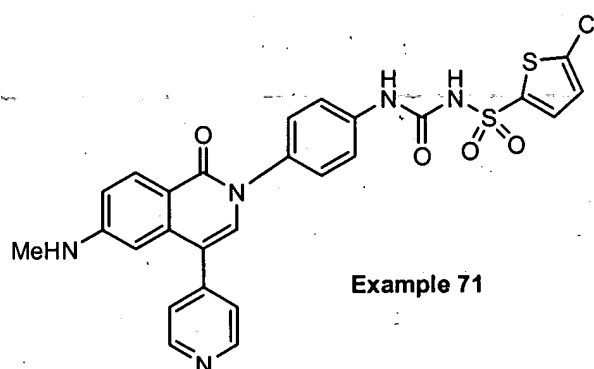
Example 68



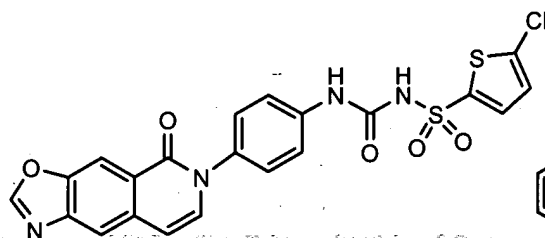
Example 69



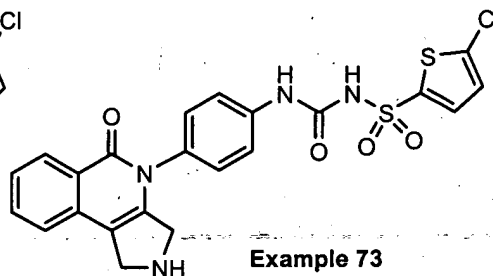
Example 70



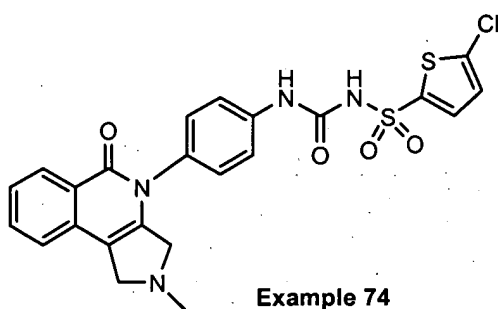
Example 71



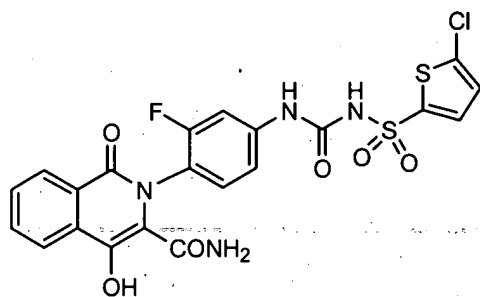
Example 72



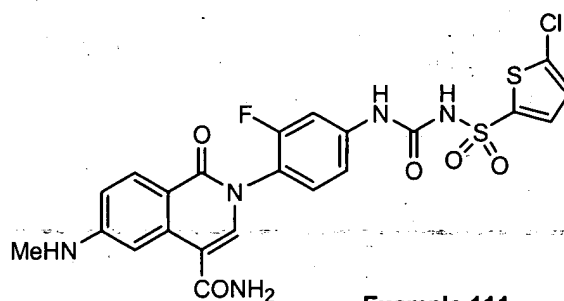
Example 73



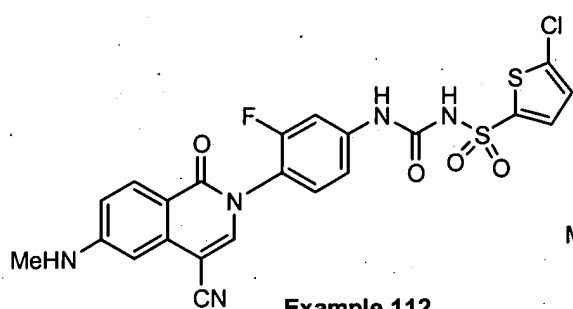
Example 74



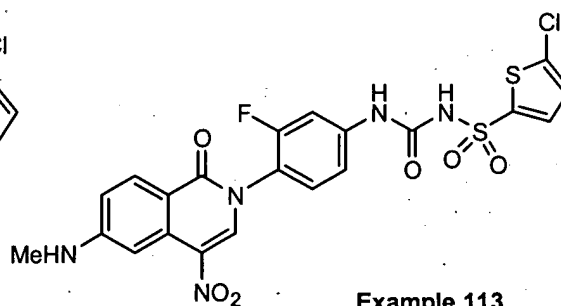
Example 110



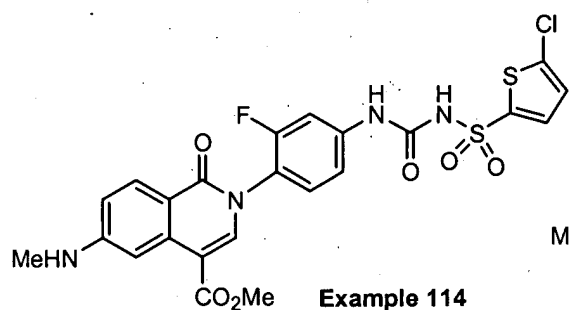
Example 111



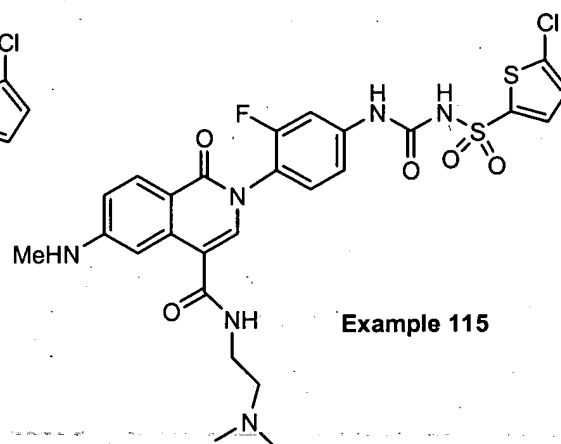
Example 112



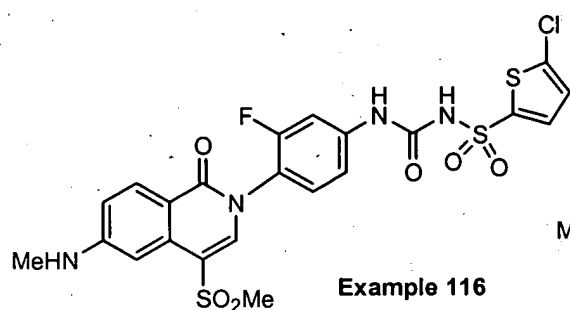
Example 113



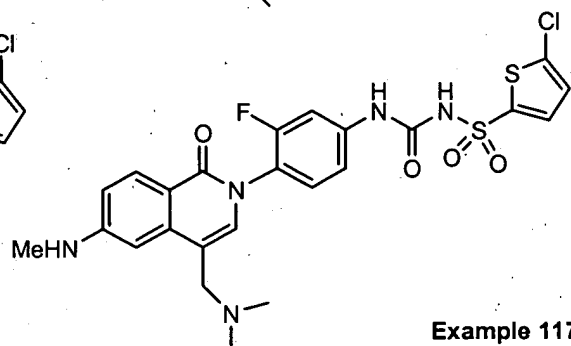
Example 114



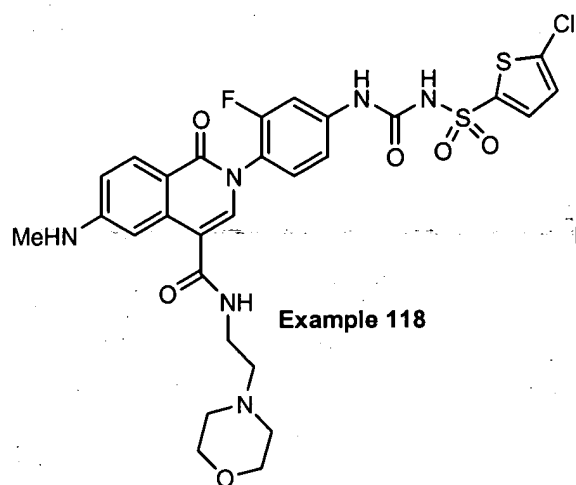
Example 115



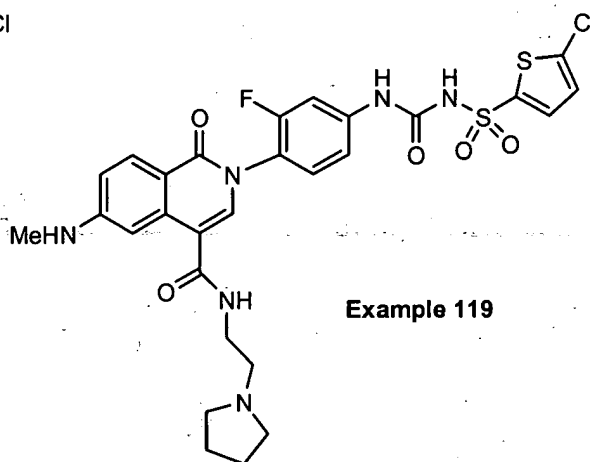
Example 116



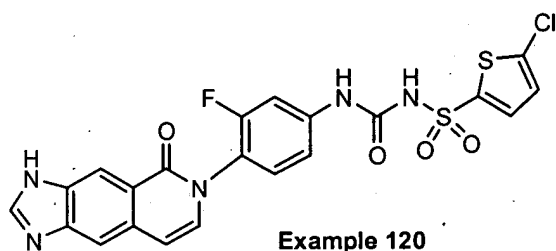
Example 117



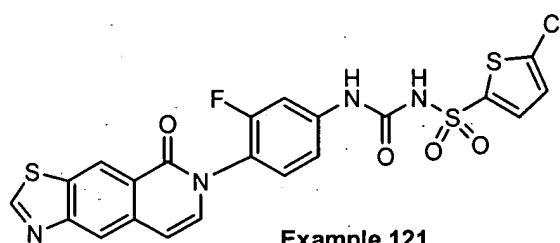
Example 118



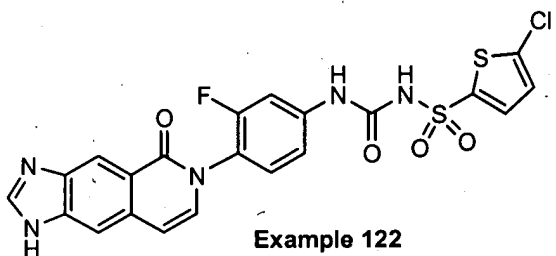
Example 119



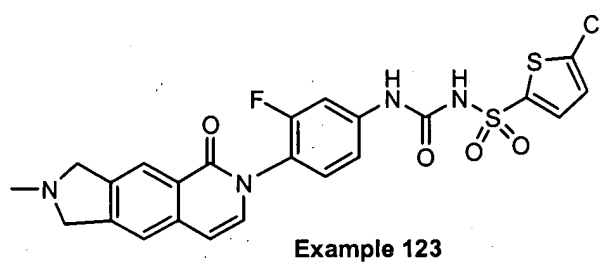
Example 120



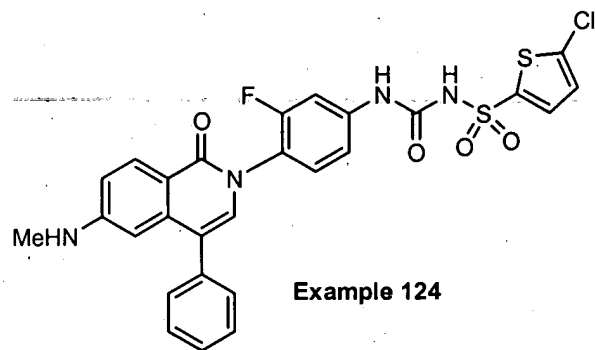
Example 121



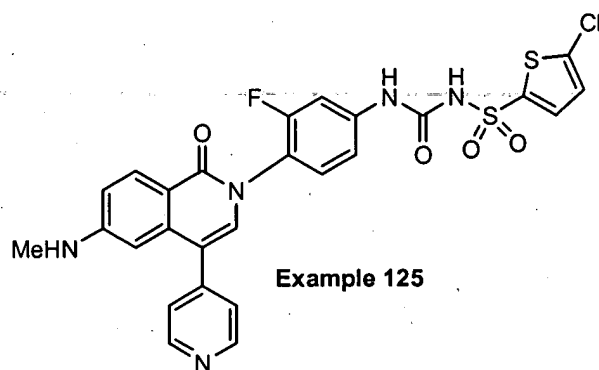
Example 122



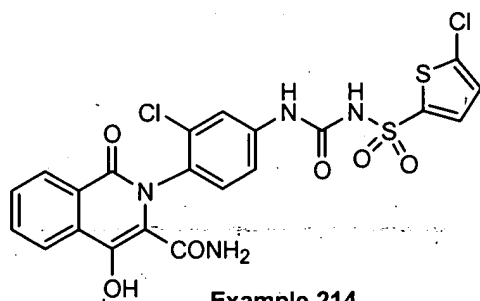
Example 123



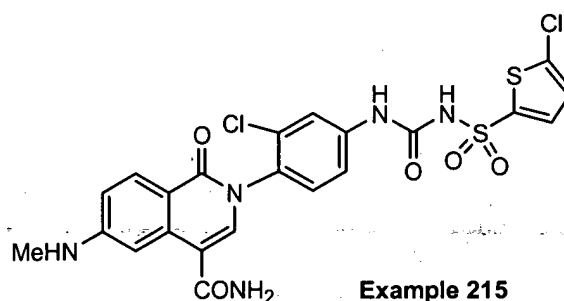
Example 124



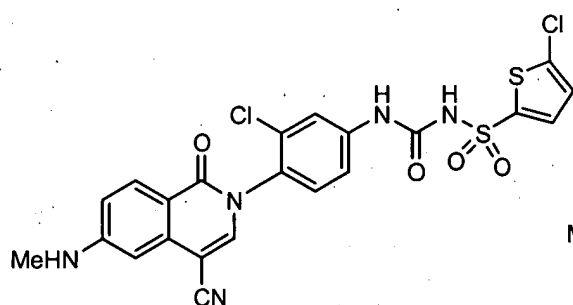
Example 125



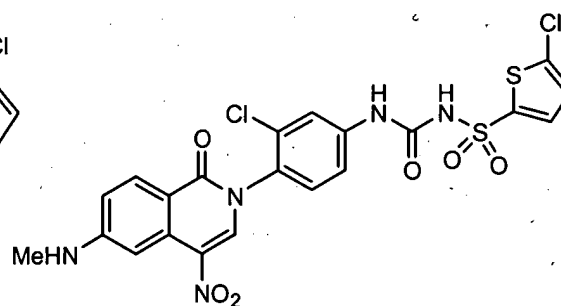
Example 214



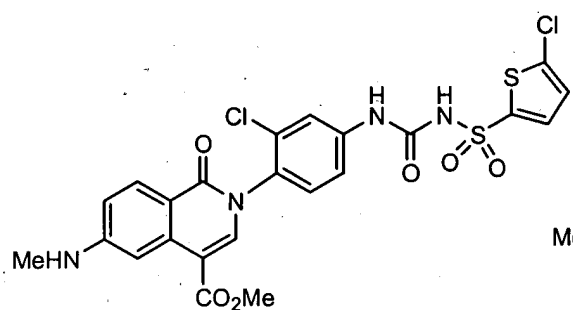
Example 215



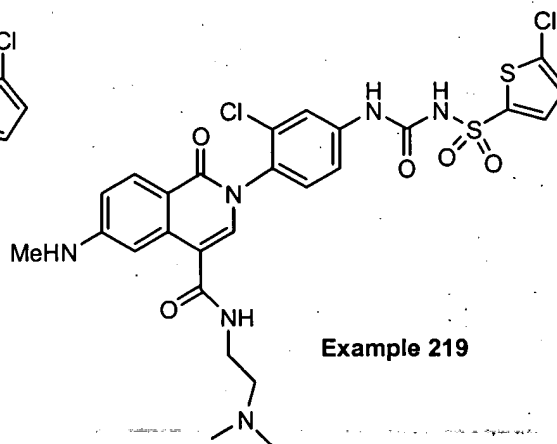
Example 216



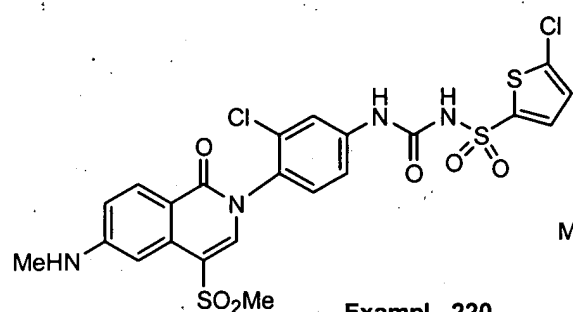
Example 217



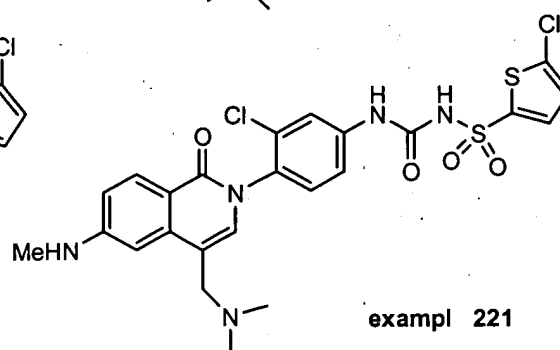
Example 218



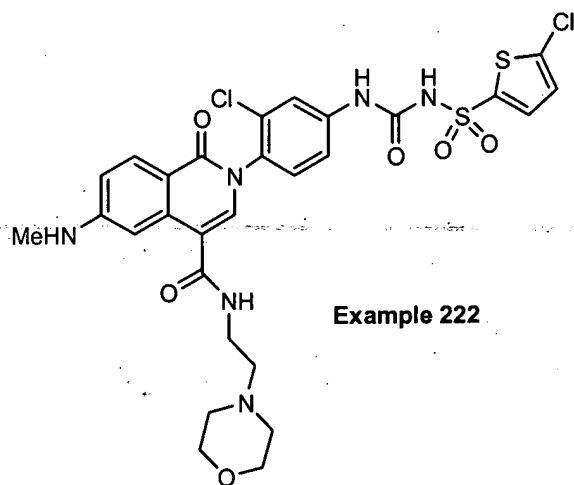
Example 219



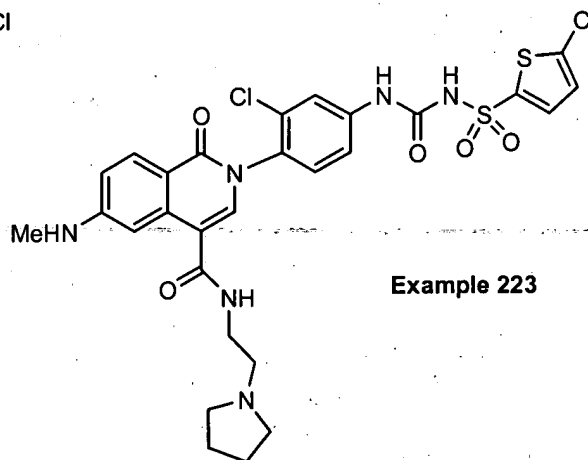
Exempl 220



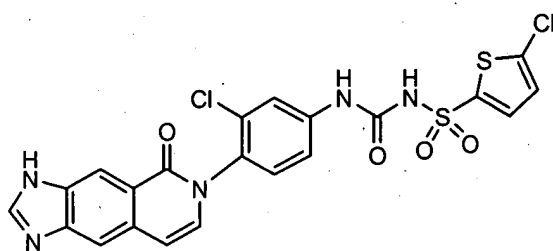
exempl 221



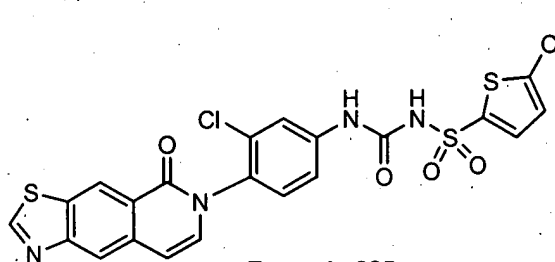
Example 222



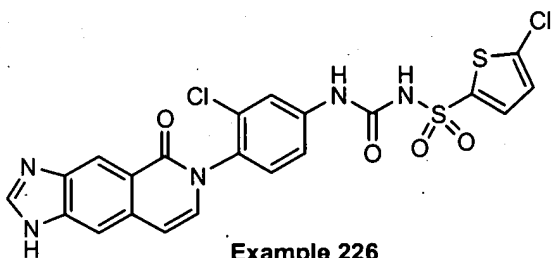
Example 223



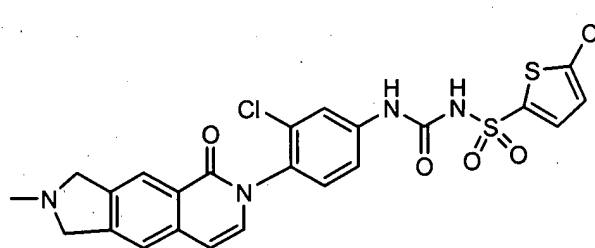
Example 224



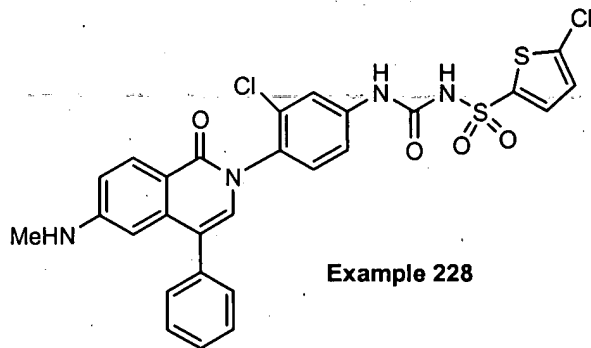
Example 225



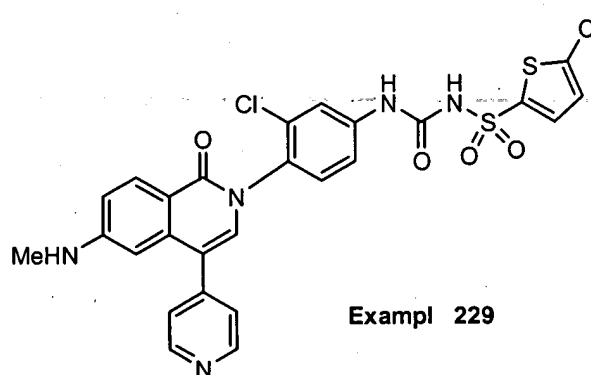
Example 226



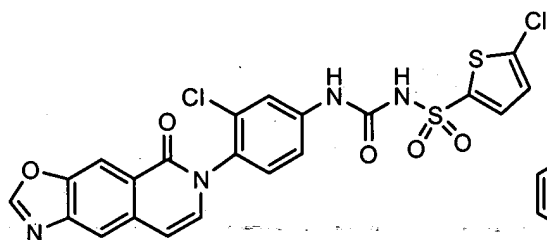
Example 227



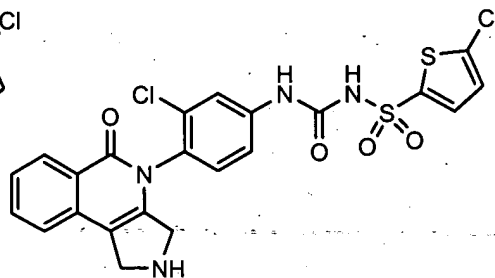
Example 228



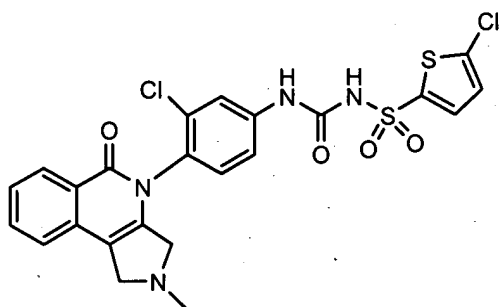
Exempl 229



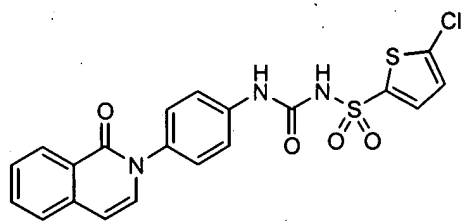
Example 230



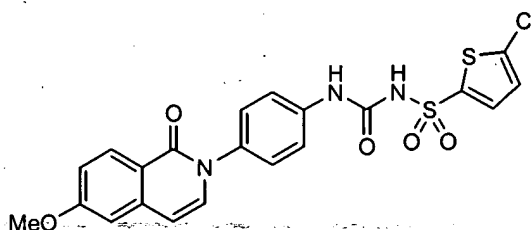
Example 231



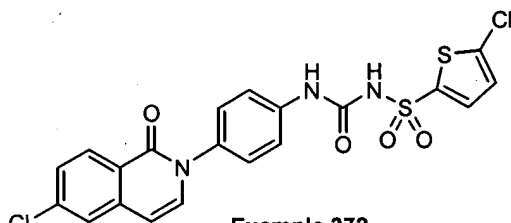
Example 232



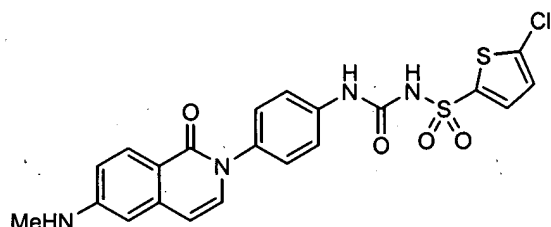
Example 370



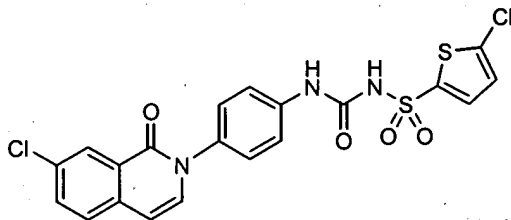
Example 371



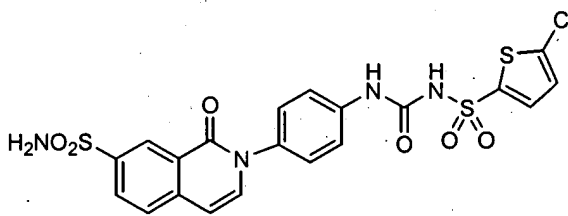
Example 372



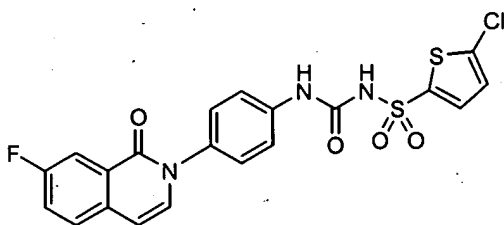
Example 373



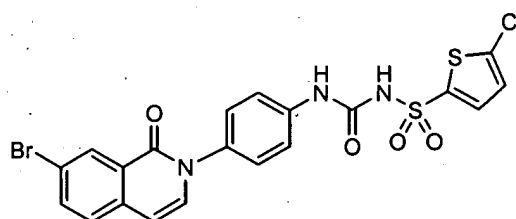
Example 374



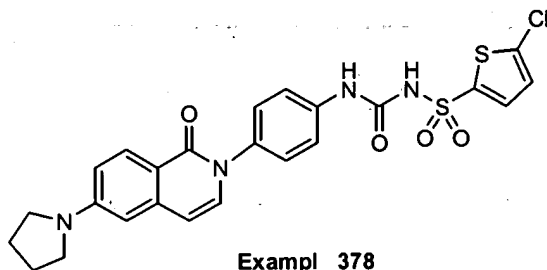
Example 375



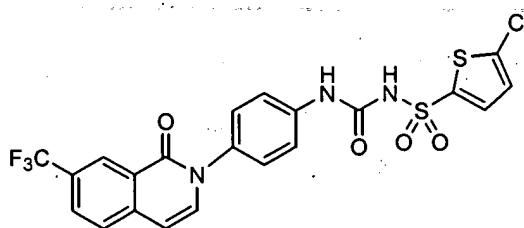
Example 376



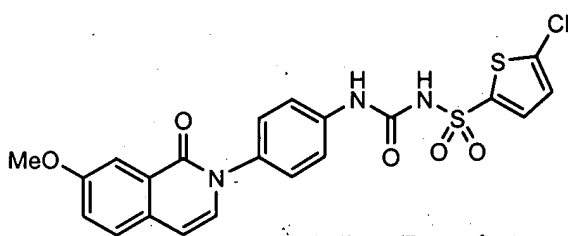
Example 377



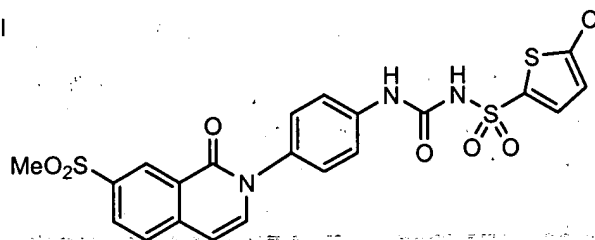
Examl 378



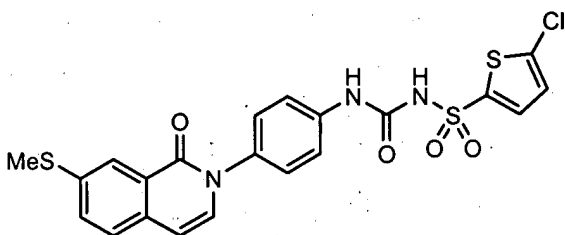
Examl 379



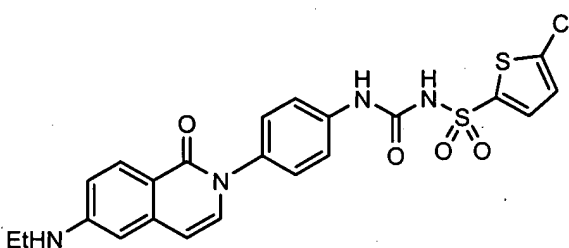
Example 380



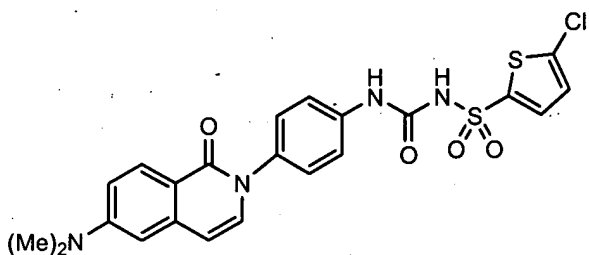
Example 381



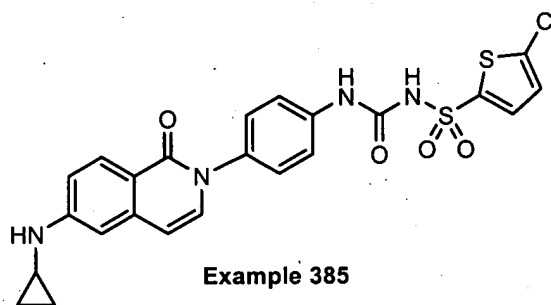
Example 382



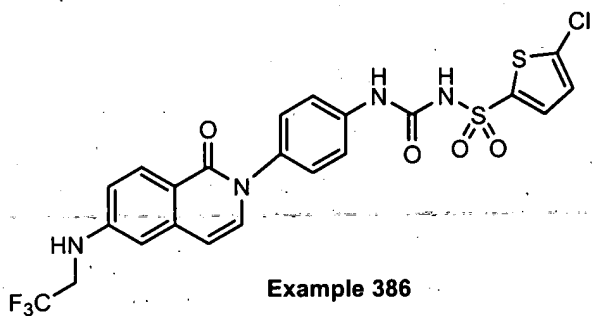
Example 383



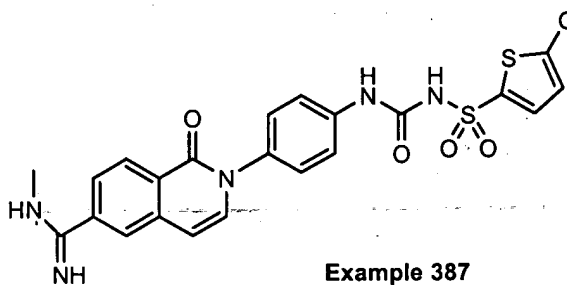
Example 384



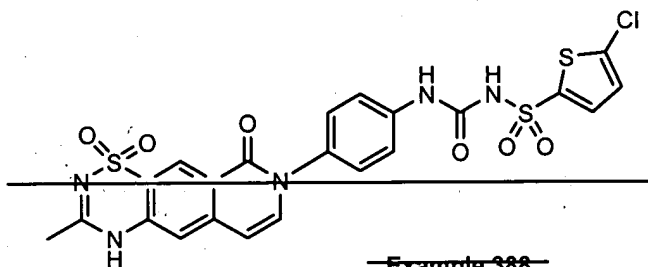
Example 385



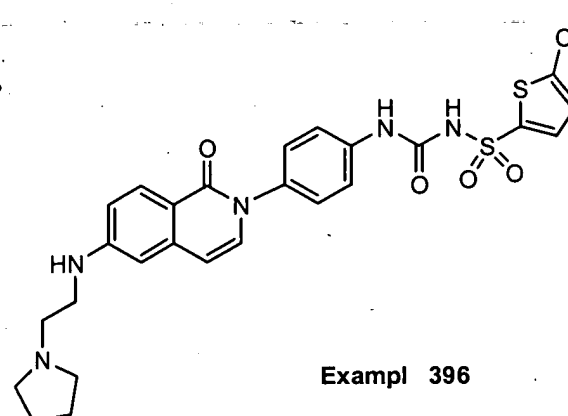
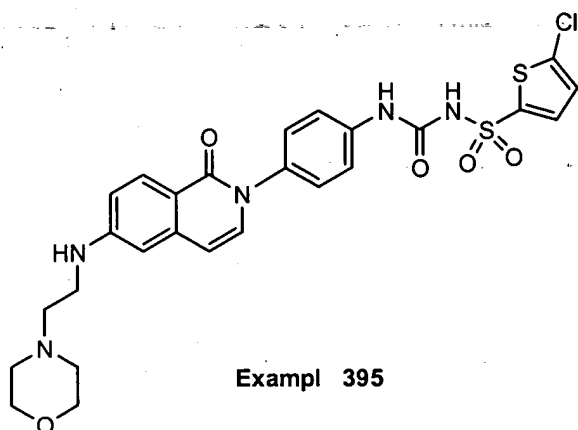
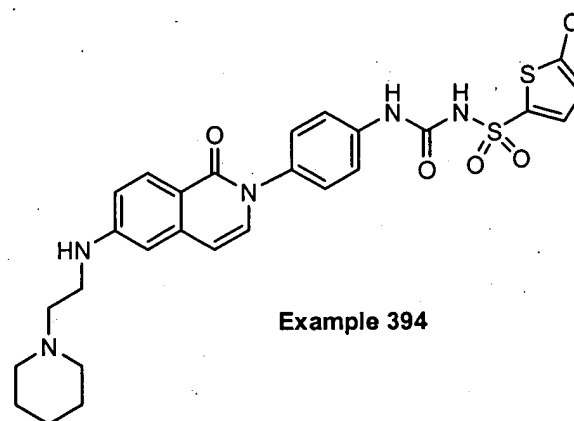
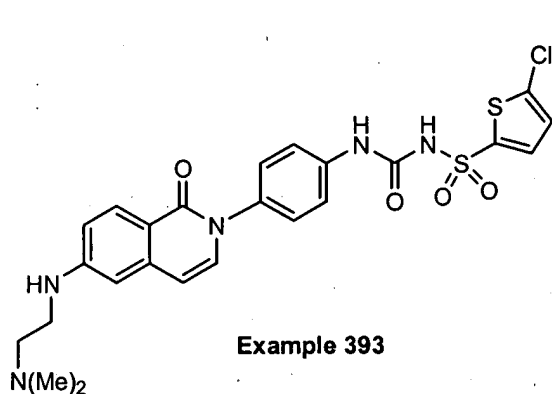
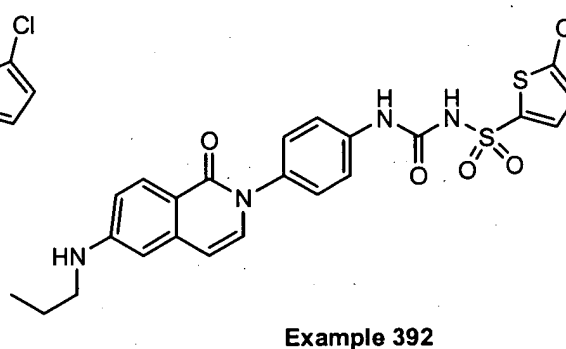
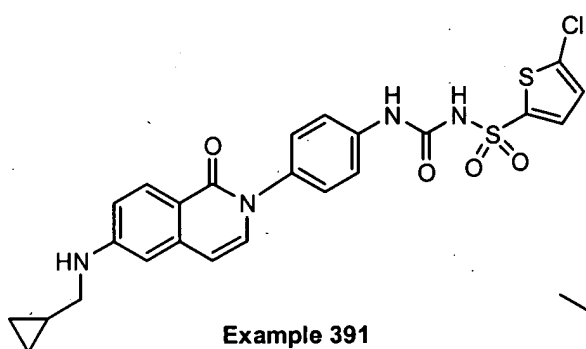
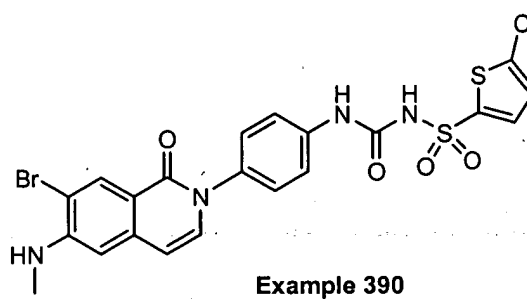
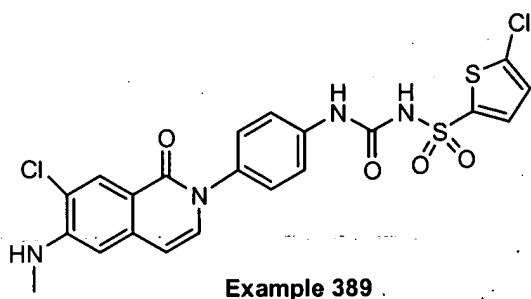
Example 386

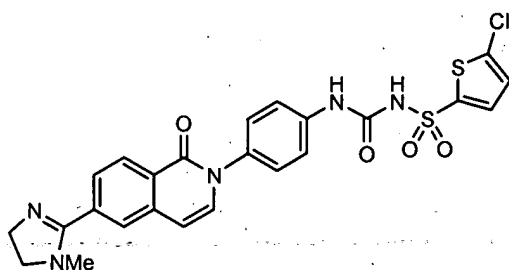


Example 387

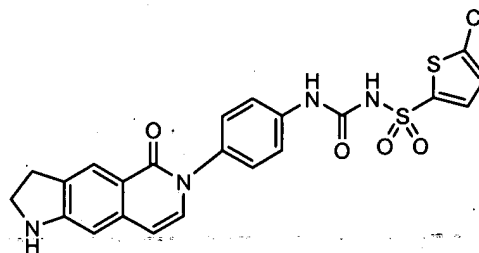


~~Example 388~~

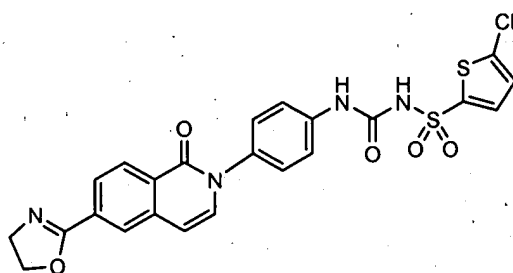




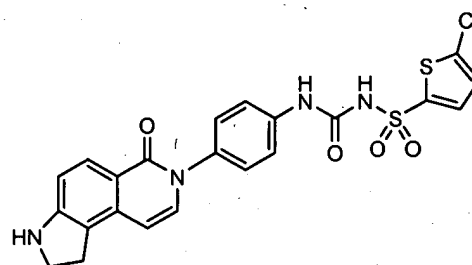
Example 397



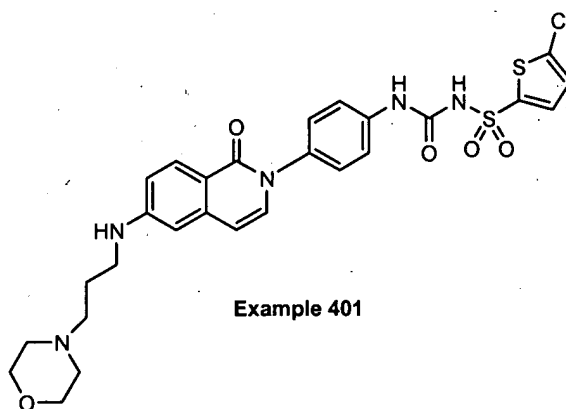
Example 398



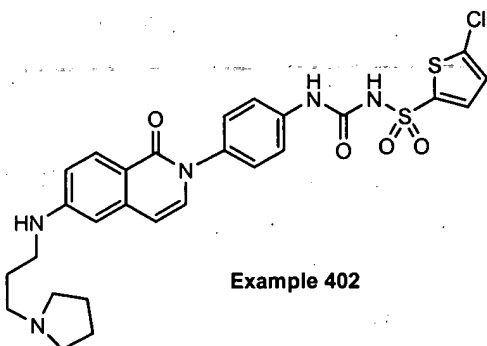
Example 399



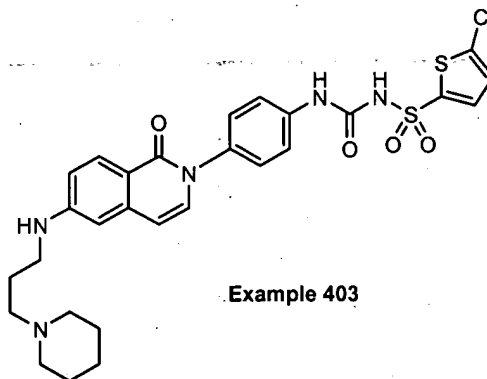
Example 400



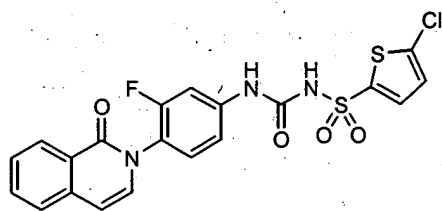
Example 401



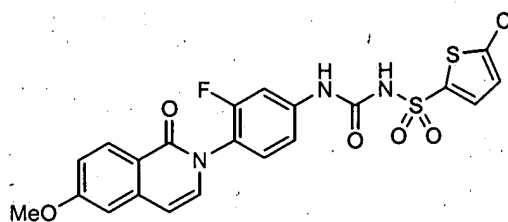
Example 402



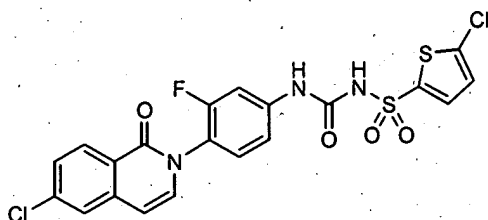
Example 403



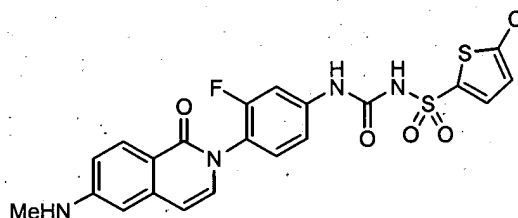
Example 404



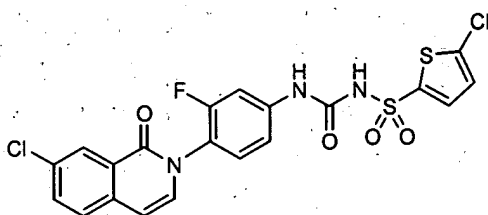
Example 405



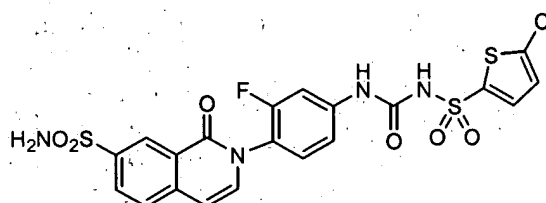
Example 406



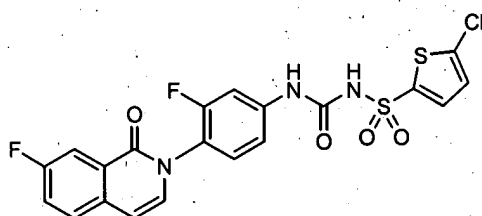
Example 407



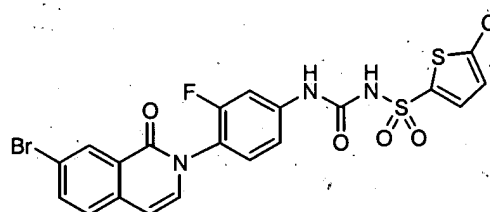
Example 408



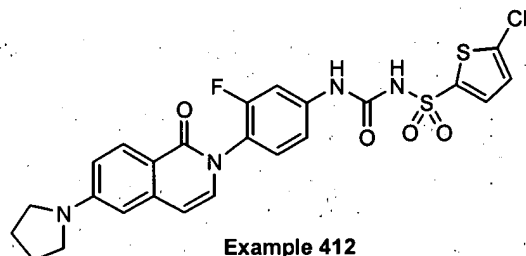
Example 409



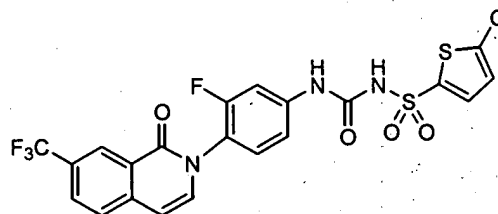
Example 410



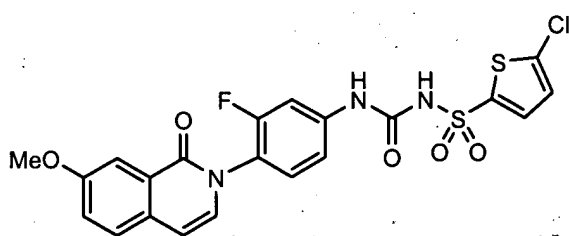
Example 411



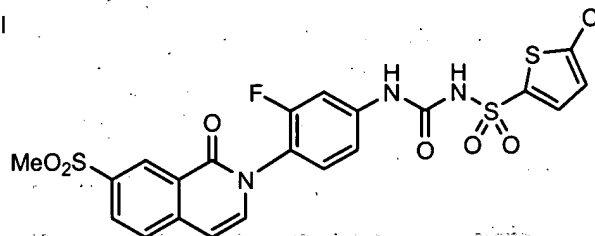
Example 412



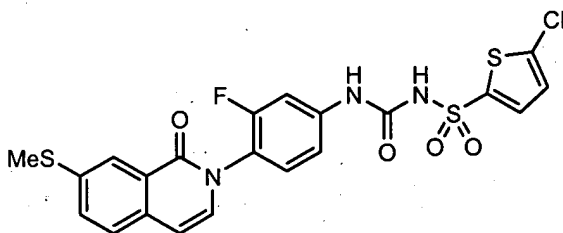
Examl 413



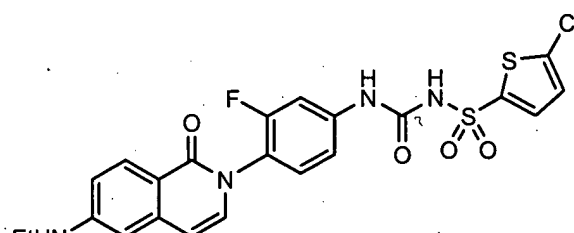
Example 414



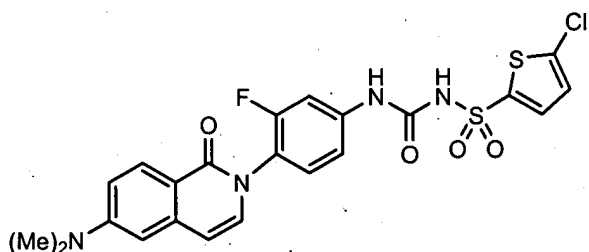
Example 415



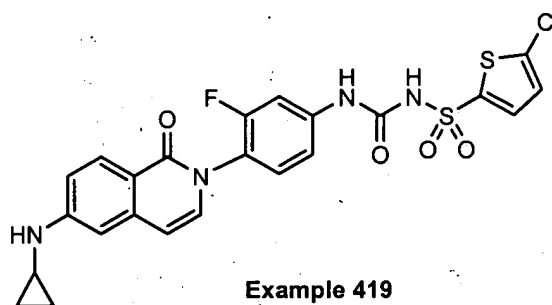
Example 416



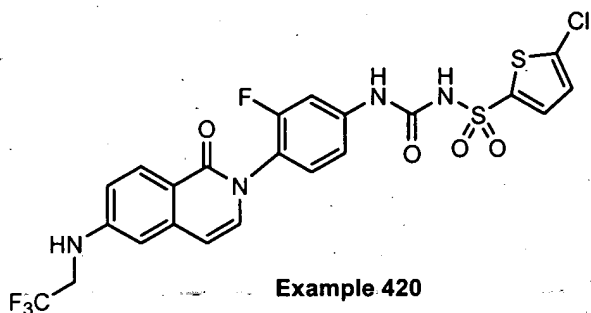
Example 417



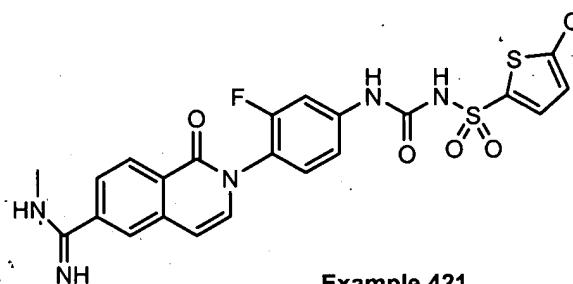
Example 418



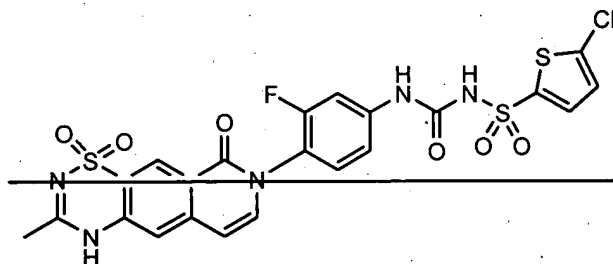
Example 419



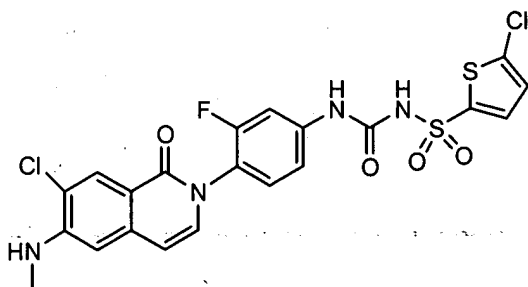
Example 420



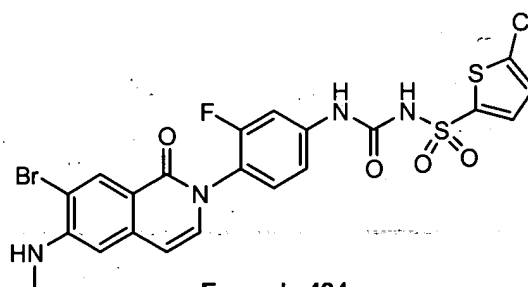
Example 421



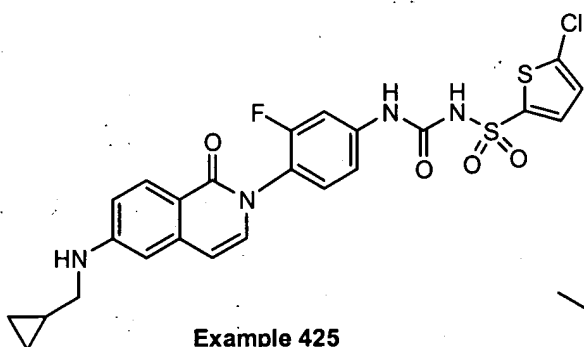
~~**Example 422**~~



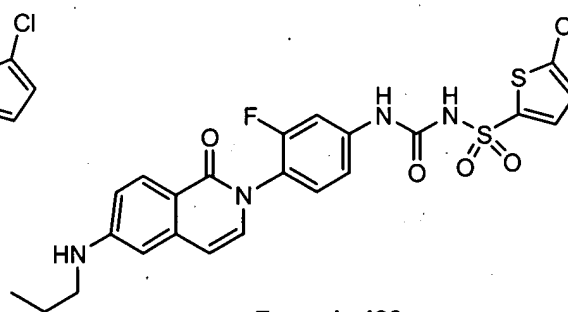
Example 423



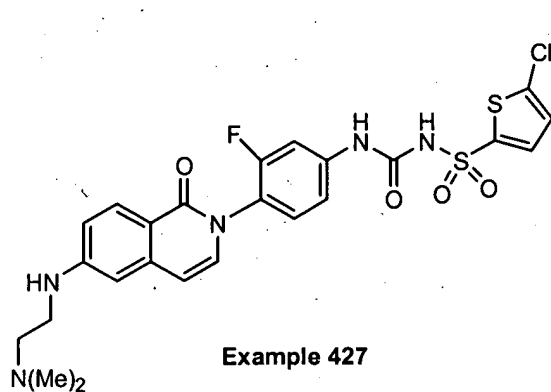
Example 424



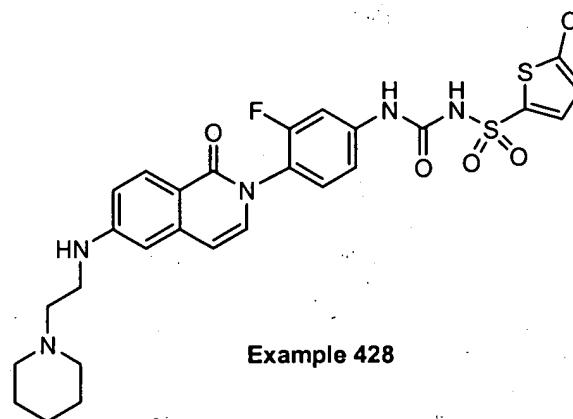
Example 425



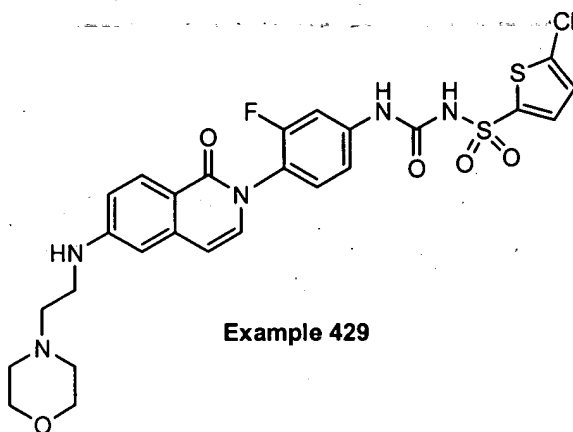
Example 426



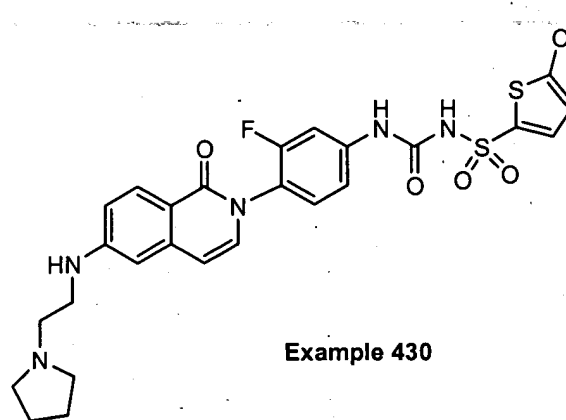
Example 427



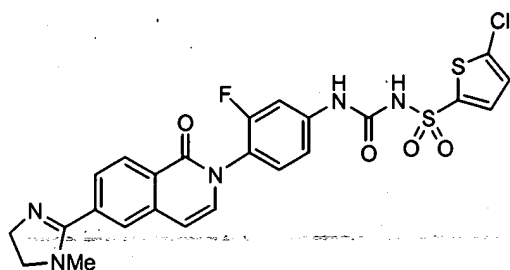
Example 428



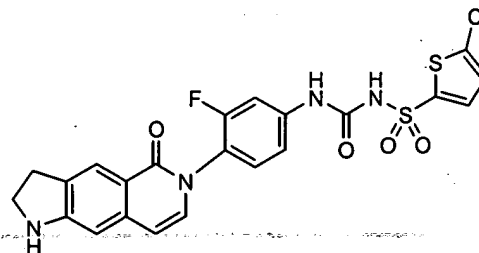
Example 429



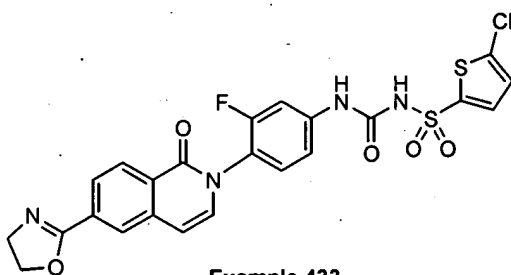
Example 430



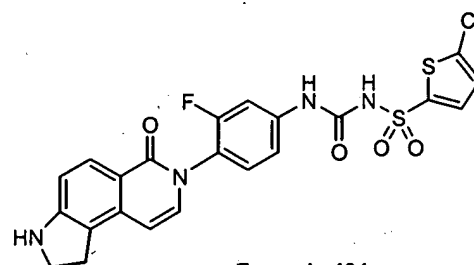
Example 431



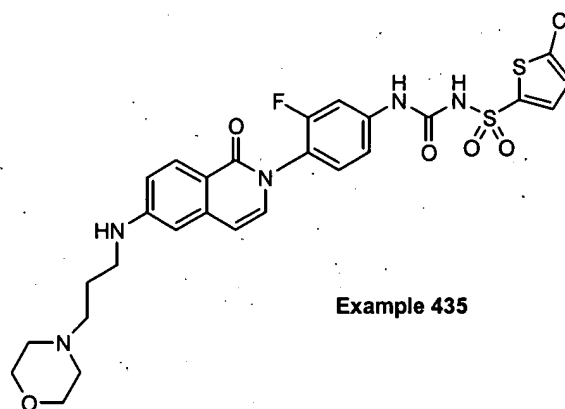
Example 432



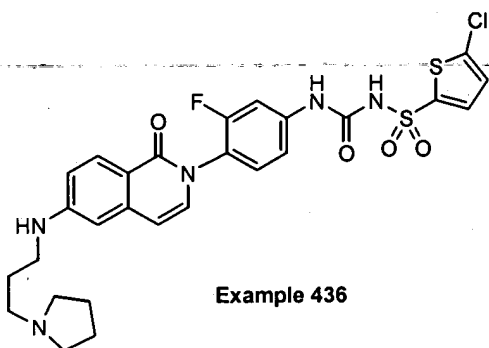
Example 433



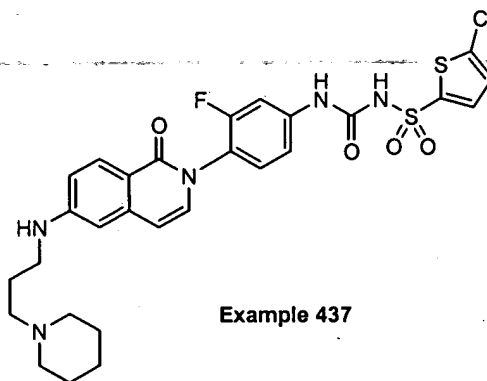
Example 434



Example 435



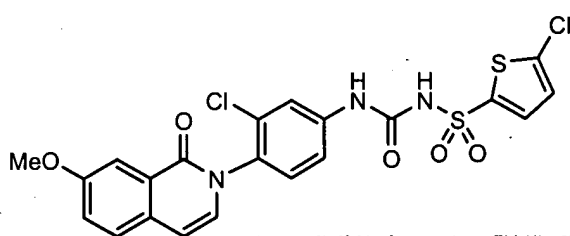
Example 436



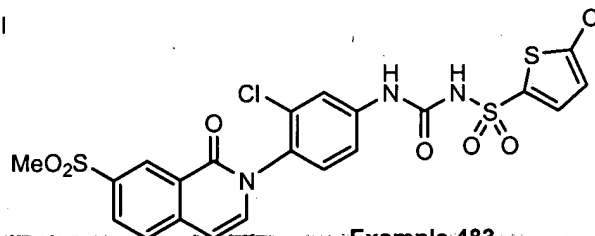
Example 437

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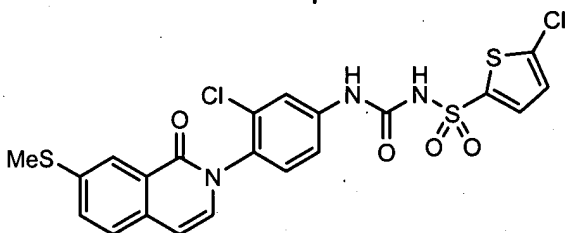




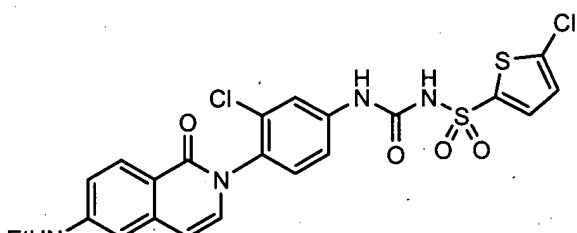
Example 482



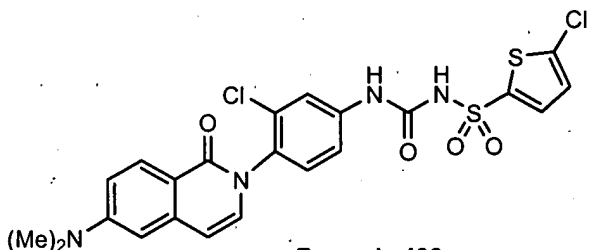
Example 483



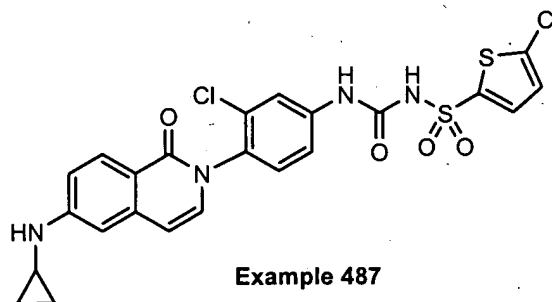
Example 484



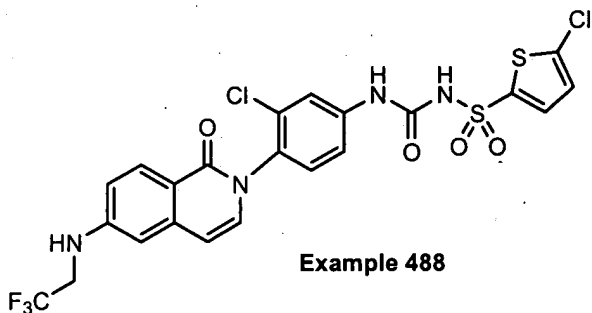
Example 485



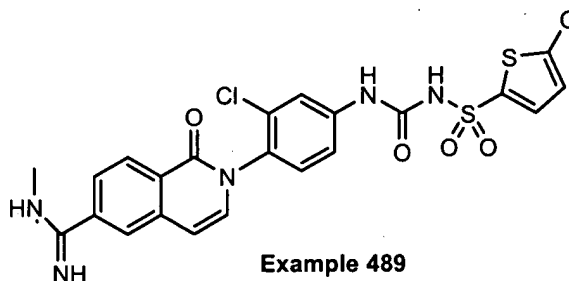
Example 486



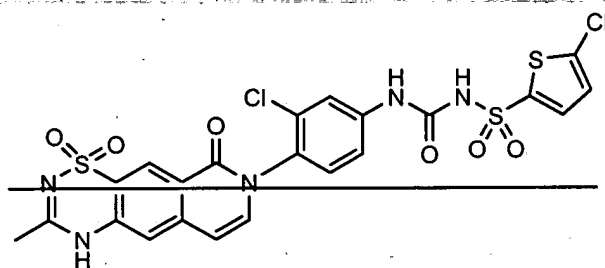
Example 487



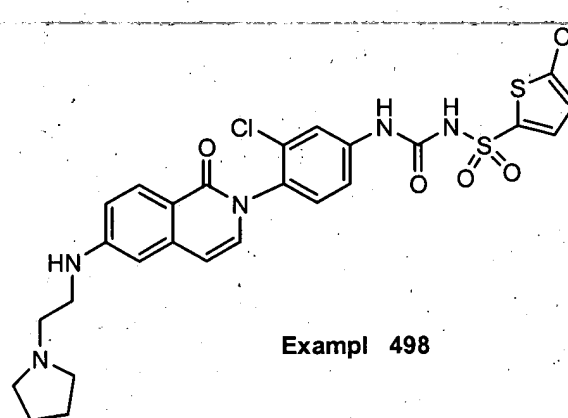
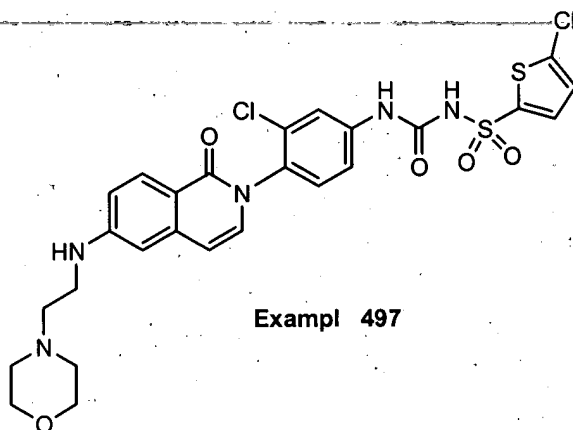
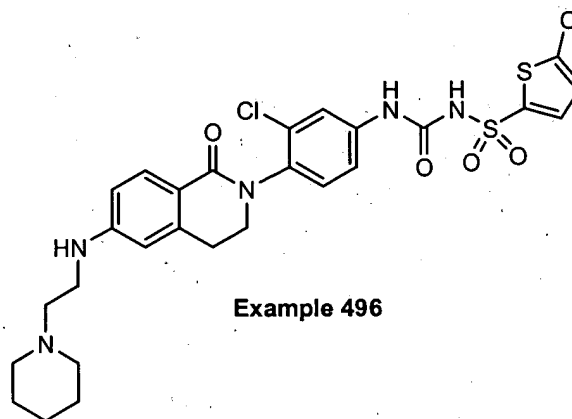
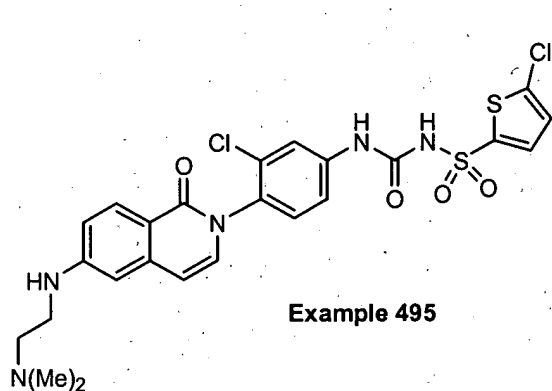
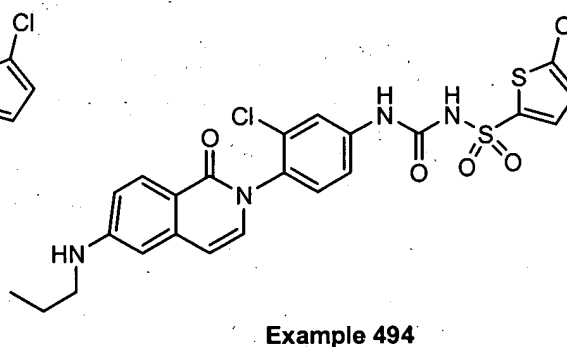
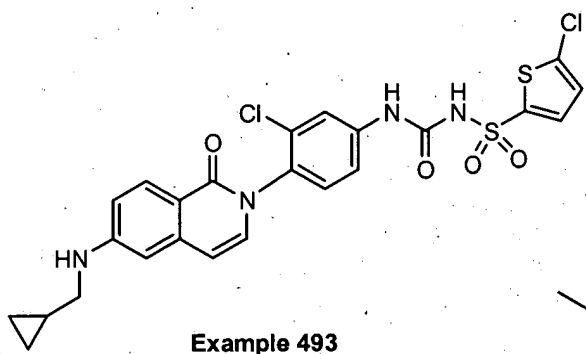
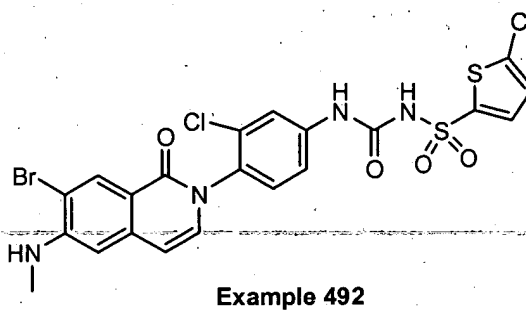
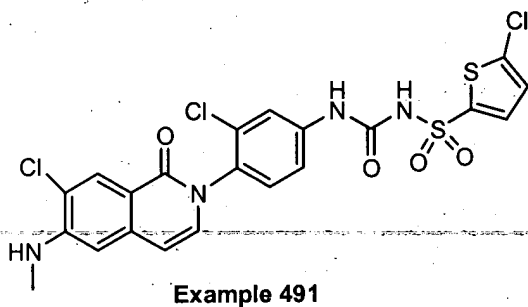
Example 488

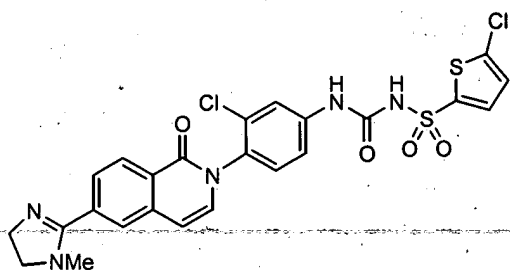


Example 489

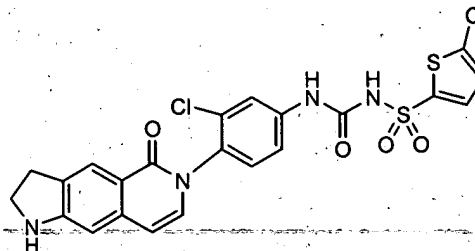


Example 490

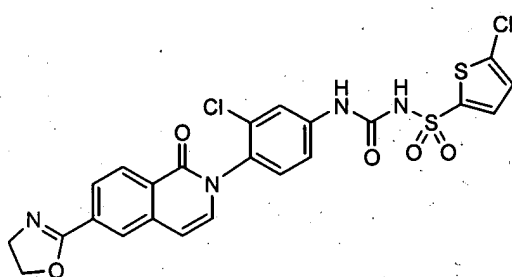




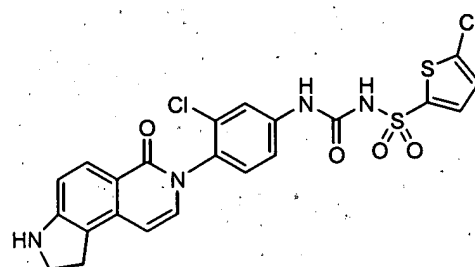
Example 499



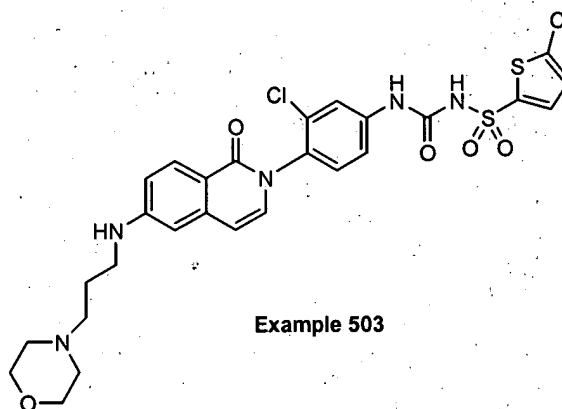
Example 500



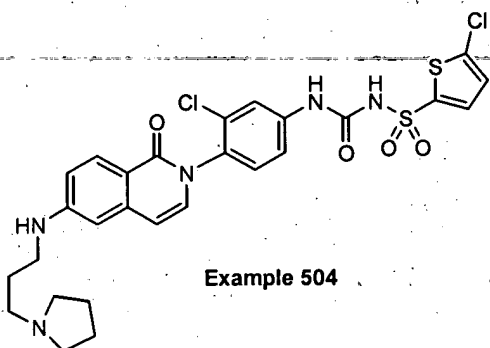
Example 501



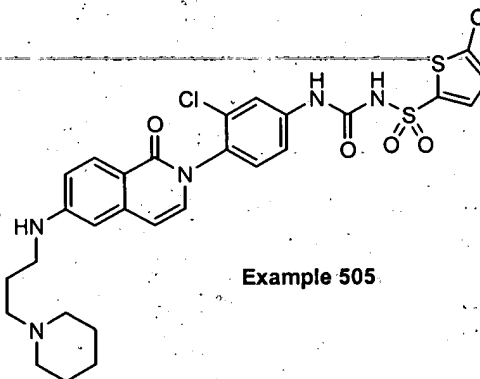
Example 502



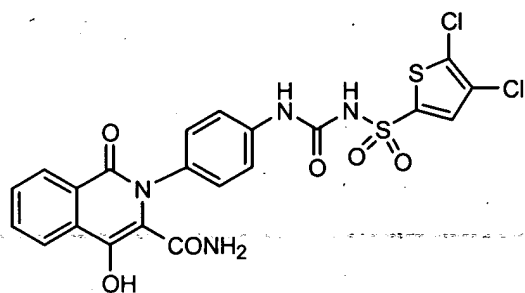
Example 503



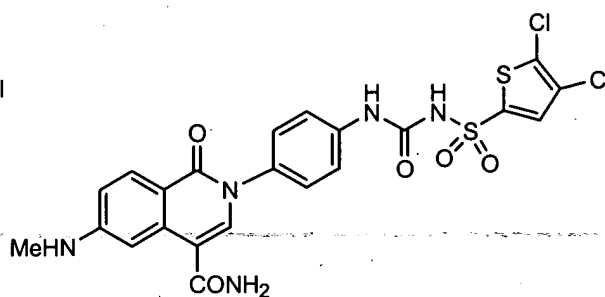
Example 504



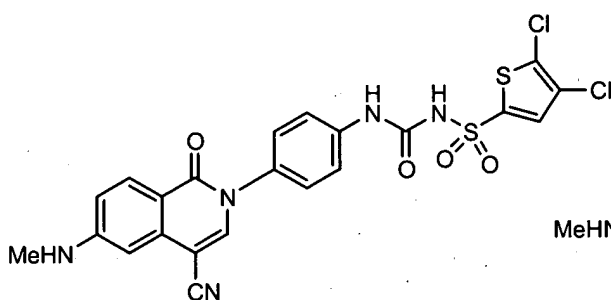
Example 505



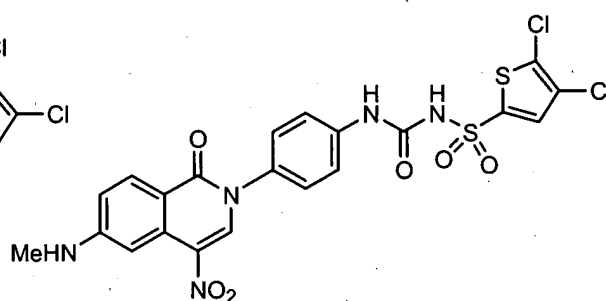
Example 769



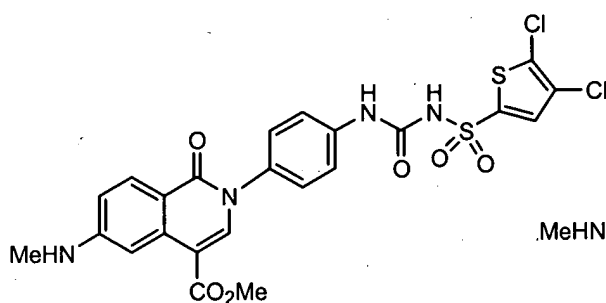
Example 770



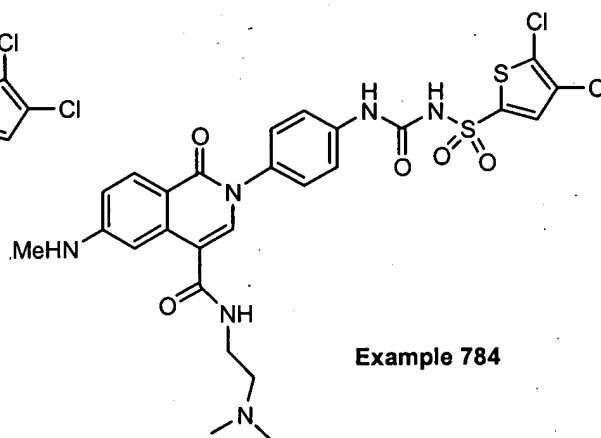
Example 781



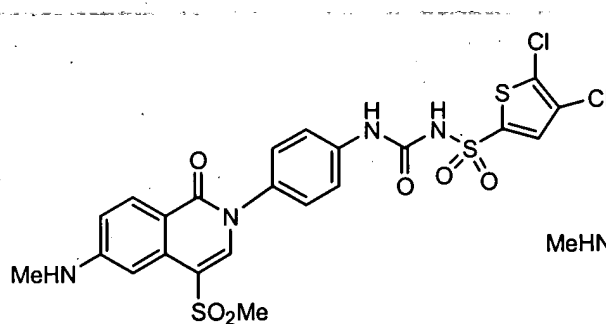
Example 782



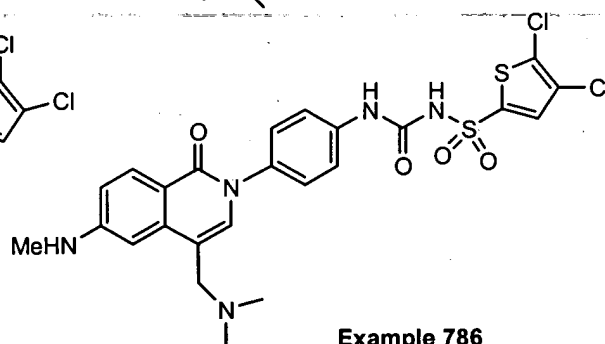
Example 783



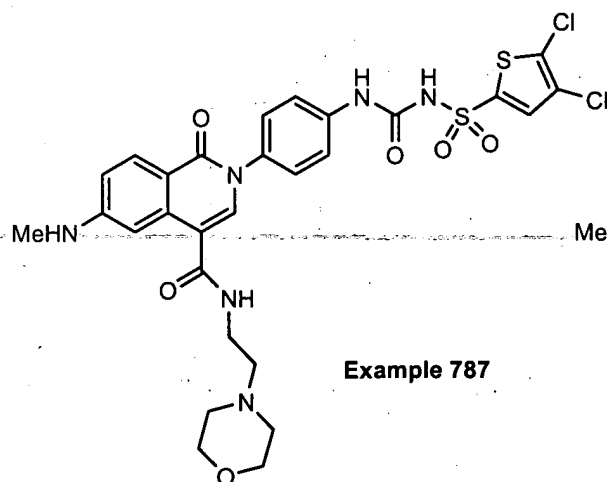
Example 784



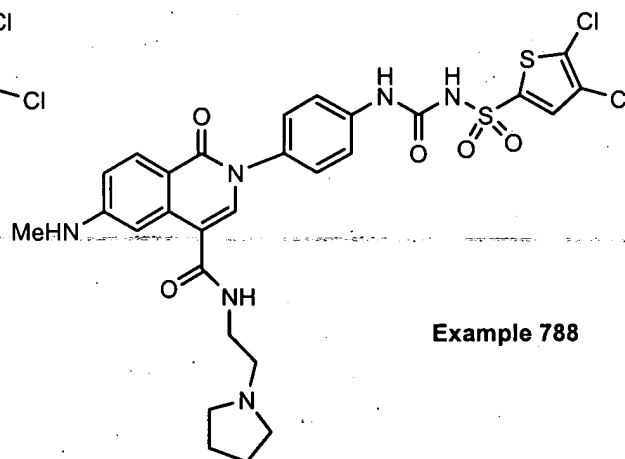
Example 785



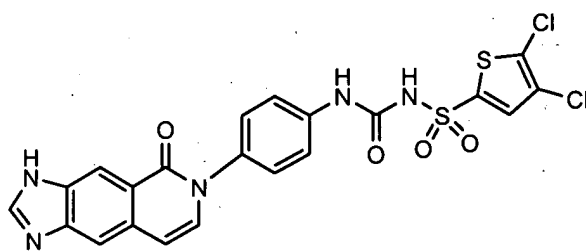
Example 786



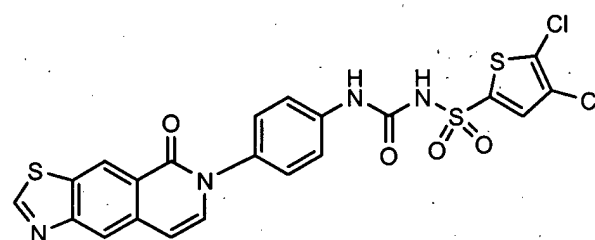
Example 787



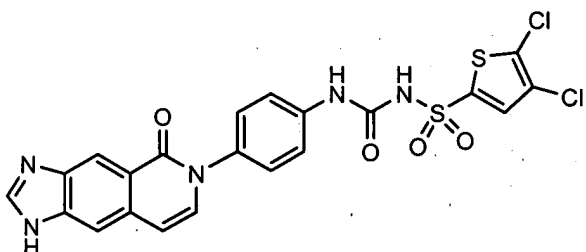
Example 788



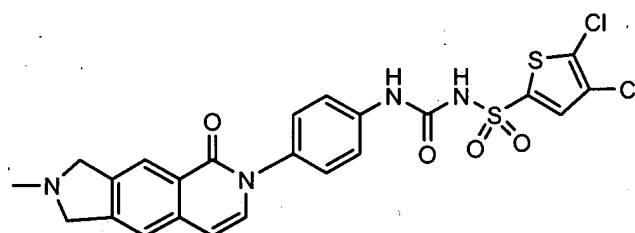
Example 789



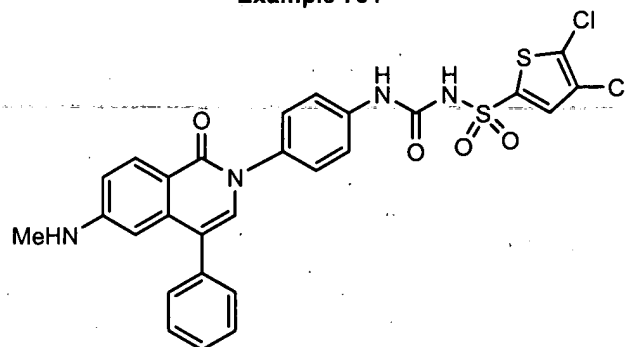
Example 790



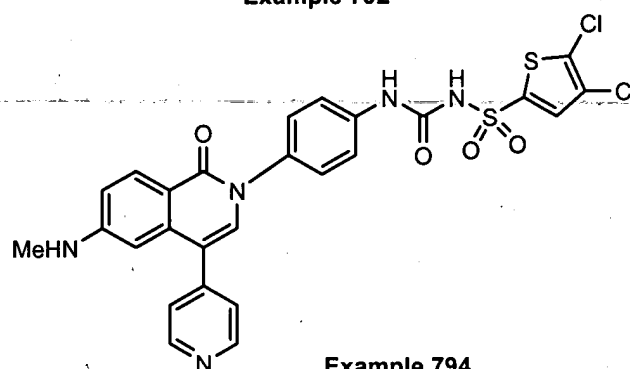
Example 791



Example 792



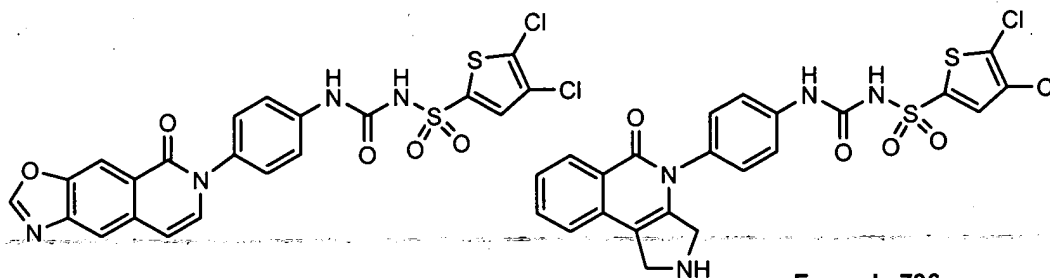
Example 793



Example 794

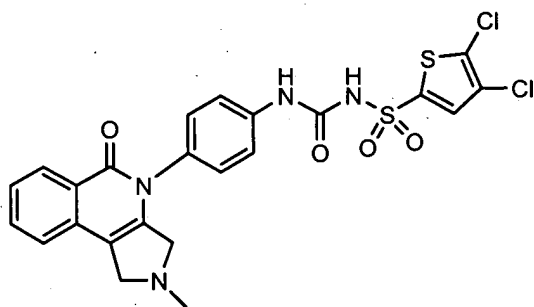
Appl. No. 09/920,325
Amdt. dated November 13, 2003
Amendment under 37 CFR 1.116 Expedited Procedure
Examining Group 1624

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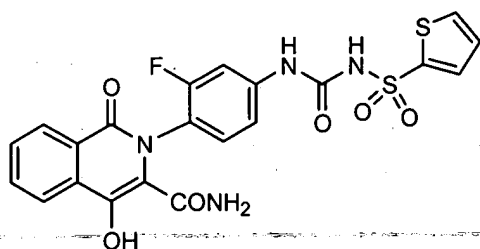


Example 795

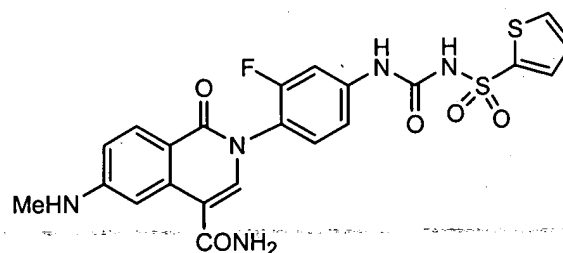
Example 796



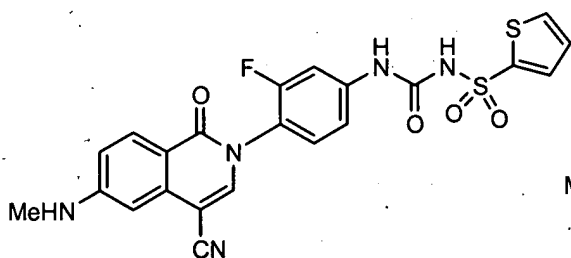
Example 797



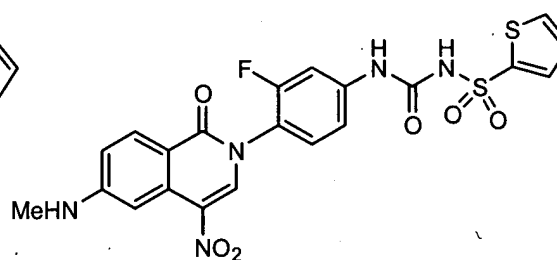
Example 833



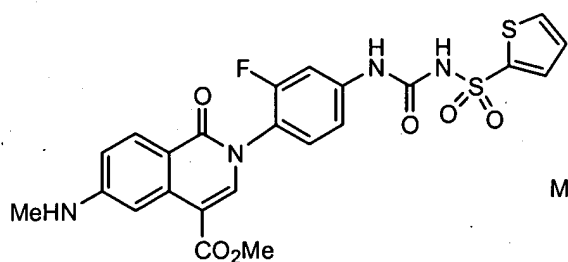
Example 834



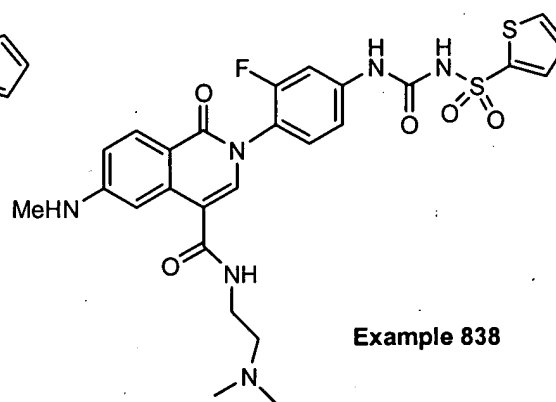
Example 835



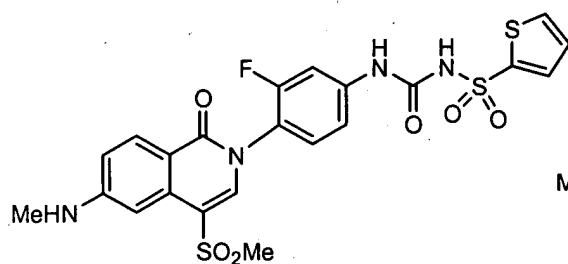
Example 836



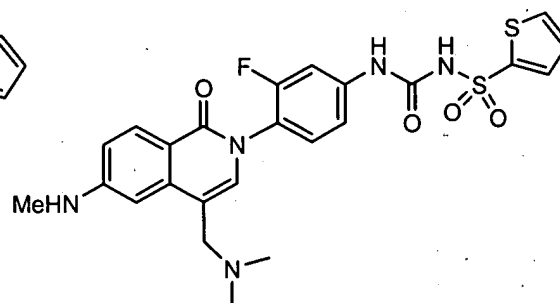
Example 837



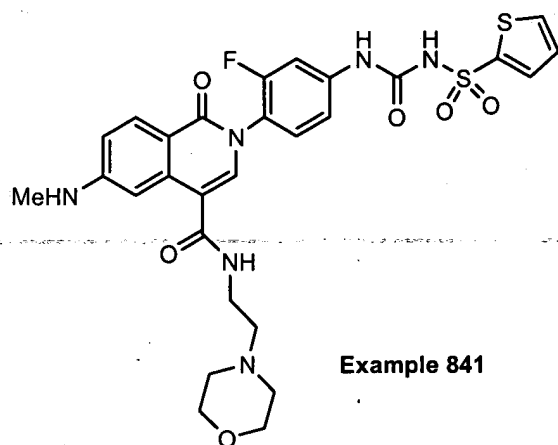
Example 838



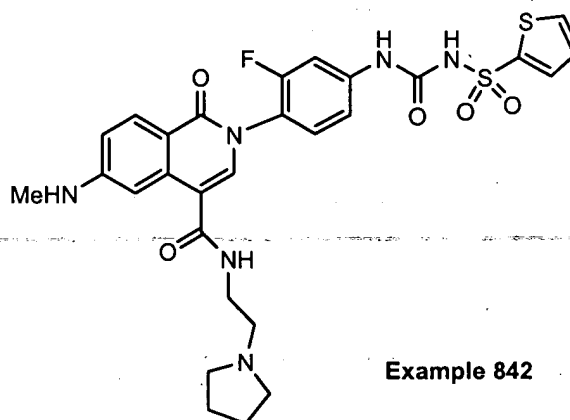
Example 839



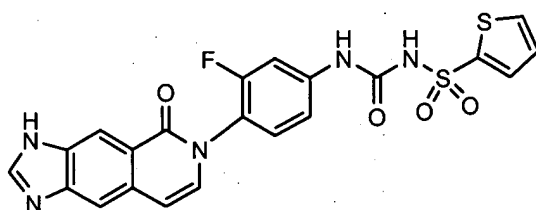
Example 840



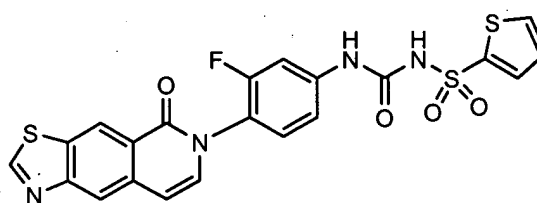
Example 841



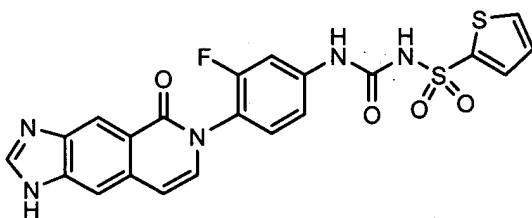
Example 842



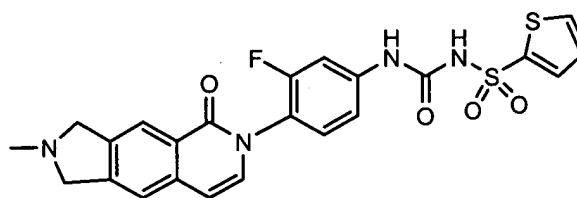
Example 843



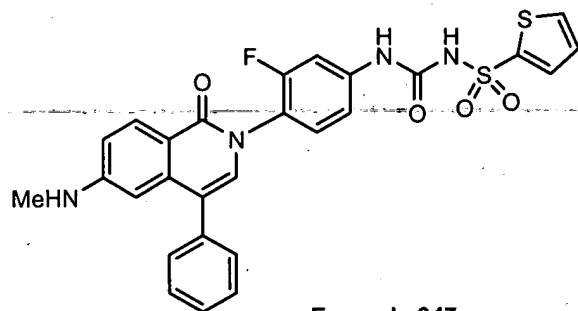
Example 844



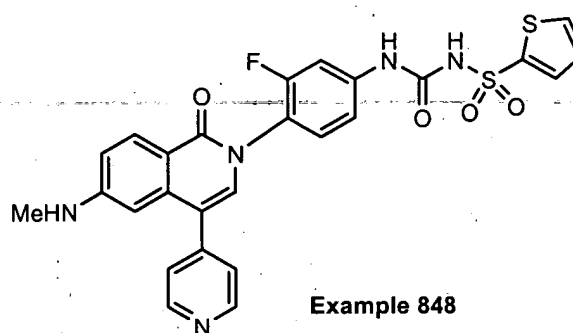
Example 845



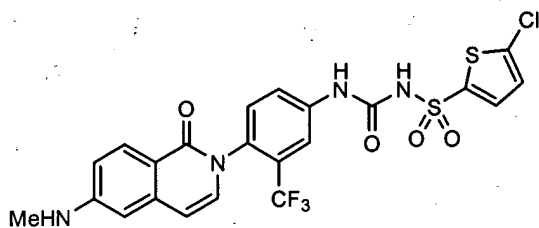
Example 846



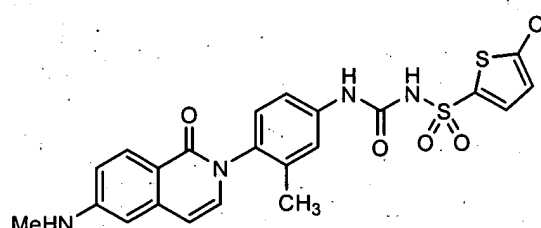
Example 847



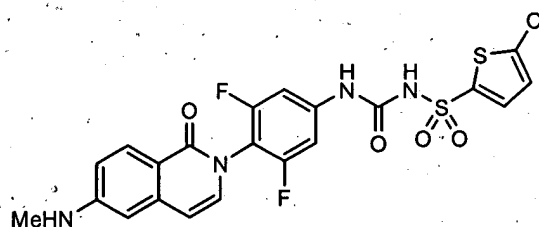
Example 848



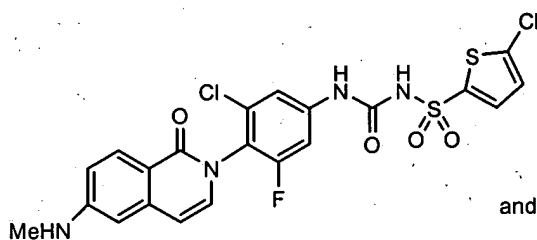
Example 933



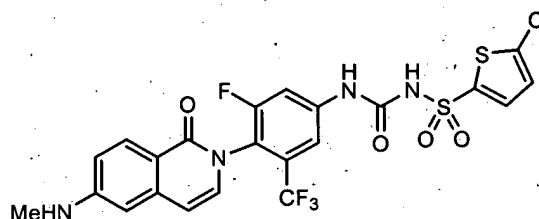
Example 934



Example 936



Example 937



Example 938

26. (Currently amended) A pharmaceutical composition **for treating thrombosis in a mammal** comprising a therapeutically effective amount of a compound according to claim 23, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

27. (Canceled) A pharmaceutical composition of claim 26, wherein said therapeutically effective amount is an amount effective to inhibit platelet aggregation in the mammal.

28. (Canceled) A pharmaceutical composition of claim 27, wherein said platelet aggregation is ADP-dependent aggregation.

29. (Canceled) A pharmaceutical composition of claims 26 and 28, wherein said mammal is a human.

30. (Canceled) A pharmaceutical composition of claim 26, wherein said compound is an effective inhibitor of [³H]2-MeS-ADP binding to platelet ADP receptors.

31. (Currently amended) A pharmaceutical composition **for treating thrombosis in a mammal** comprising a therapeutically effective amount of a compound according to claims 24-25, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

32. (Canceled) A pharmaceutical composition of claim 31, wherein said therapeutically effective amount is an amount effective to inhibit platelet aggregation in the mammal.

33. (Canceled) A pharmaceutical composition of claim 32, wherein said platelet aggregation is ADP-dependent aggregation.

34. (Canceled) A pharmaceutical composition of claims 30 and 33, wherein said mammal is a human.

35. (Canceled) A pharmaceutical composition of claim 31, wherein said compound is an effective inhibitor of [³H]2-MeS-ADP binding to platelet ADP receptors.

36. (Original) A method for treating thrombosis in a mammal comprising the step of administering to a mammal a therapeutically effective amount of a compound of claim 23 or a pharmaceutically acceptable salt thereof.

37. (Original) A method of claim 36, wherein said mammal is a human.

38. (Original) A method of claim 36, wherein said thrombosis is indicated by at least one selected from the group consisting of acute myocardial infarction, unstable angina, chronic stable angina, transient ischemic attacks, strokes, peripheral vascular disease, preeclampsia/eclampsia, deep venous thrombosis, embolism, disseminated intravascular coagulation and thrombotic cytopenic purpura, thrombotic and restenotic complications following invasive procedures resulting from angioplasty, carotid endarterectomy, post CABG (coronary artery bypass graft) surgery, vascular graft surgery, stent placements and insertion of endovascular devices and prostheses.